

ATLANTIC FISHERMAN

DECEMBER
1949



Unstabilized Nylon

*LOOK for this
BIG difference*

ONLY COLUMBIAN Nylon Rope IS STABILIZED
by this patented process

Columbian's exclusive "Stabilizing" process makes the yarns and strands of nylon rope shape and conform to the lay of the rope. No fluffing . . . no fraying or untwisting of yarns . . . no unlaying of strands.

Simple test proves superiority of Columbian Nylon Rope

At the left in the actual photo above is a length of unstabilized nylon rope from which a piece has been cut with a knife. Notice that the rope has lost its lay. The individual yarns are untwisted in a hard-to-handle fluffy mass. This always means the loss of several feet of valuable rope.

Big Advantages of Columbian Stabilized Nylon

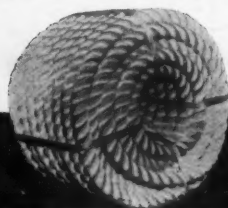
Wet or dry it's easier to handle . . . pliable . . . flexible. Resists abrasion, marine rot, water absorption and decay. Stretches under stress . . . yet resumes normal length when stress is removed. Easy on the hands. And it's 100% stronger than manila — and longer lived.

Recently, this tug using a 5½" Columbian Nylon line towed a large gasoline barge for 200 trips between Milwaukee and Chicago. The nylon line proved so satisfactory that the tug owners ordered another length of Columbian Stabilized Nylon after the rigid test.

At the right, a piece of Columbian Stabilized Nylon was also cut with a knife and the strands were "unlayed" by hand. Notice how each strand retains its form . . . each yarn holds the twist. No collapsing . . . no fluffing. It's all ready for serviceable splices and end knots.

The **BETTER** Nylon is **COLUMBIAN'S STABILIZED** Nylon Rope

*Patented process No. 2,343,892



*Columbian
Nylon*

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310-80 Genesee St., Auburn, "The Cordage City," N. Y.



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PERFORMANCE
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 for
 Auxiliary Power
 and
 Diesel Starting

KTWS
 for
 Auxiliary Power
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FOR EVERY MARINE BATTERY JOB

DRG AND DRP TYPES. For 32-volt Diesel systems. Dual insulated with Willard Rubber Insulation and glass fibre retaining mats. Sturdy, hard rubber containers. Exclusive Willard "Safety-Fill" construction to prevent overfilling. Assembled in 8-volt units. DRG types for normal service. DRP types for heavy duty service.

KTWS TYPES. Dual insulated with selected wood separators and glass fibre retaining mats. Deep sediment chambers. Extra large electrolyte space. Reinforced hard wood containers. Non-Surge Vent Plugs to prevent damaging acid spray. Available in 4, 6, or 8-volt units, in capacities from 250 to 500 ampere hours.

DSR AND DSW TYPES. For 30-volt Diesel systems. Sturdy, hard rubber containers. Exclusive Willard "Safety-Fill" construction to prevent overfilling. Assembled in 6-volt units. DSW types with selected wood separators for normal service. DSR types with Willard Rubber Insulation for severe service.

DSR and DSW
 for
 Auxiliary Power
 and
 Diesel Starting

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re-powered with a
NORDBERG DIESEL



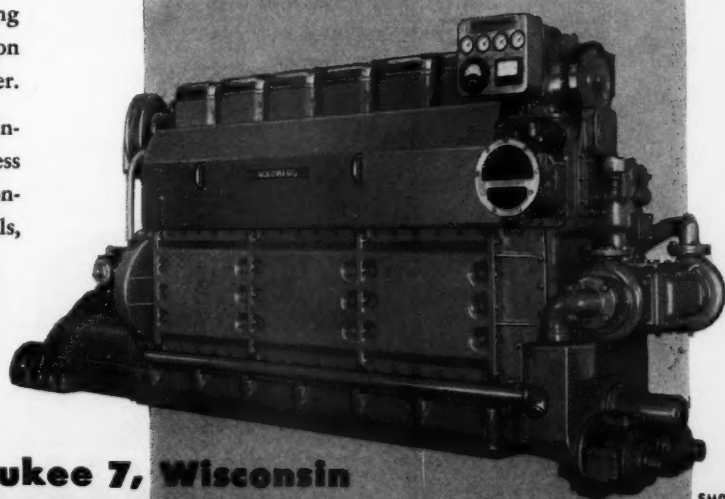
The 94 ft. dragger *STANLEY B. BUTLER*, owned by Capt. Olaf Anderson, has long been associated with the fishing industry around New Bedford, Mass. Helping to give this sturdy hull new vitality is her Nordberg Diesel main propulsion engine, installed some months ago in a repowering operation. The Nordberg Diesel chosen by Captain Anderson is a 6-cylinder, 9" x 11½" supercharged 4-cycle direct-reversing unit. Developing 480 hp at 720 rpm, and equipped with a 2:1 reduction gear, this dependable Diesel swings a 64"x48" propeller.

When considering a repowering job or a new installation, get the advantages of more power in less space — less weight — more speed — better fuel economy by installing a Nordberg Diesel. Write for details, outlining your requirements.

NORDBERG 4-CYCLE MARINE DIESELS for fishing craft are built in sizes from 220 to 1750 H. P. — supercharged and non-supercharged for direct or reduction gear drive. Two-cycle models built in sizes up to 8500 H. P.

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- **SAVING** 3 to 4 gallons of Diesel fuel per hour



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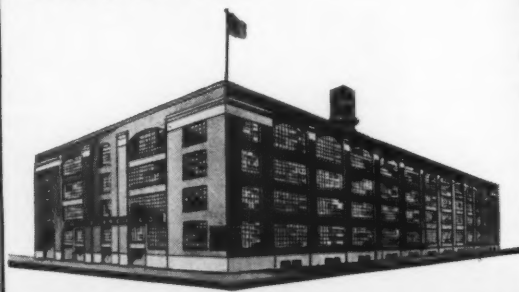




CHRISTMAS 1949

IT'S CHRISTMAS 1949! Once again that season we all love is here to make the year complete. Holly, carols, Christmas trees, and wreaths all here to bring the Christ Child into our homes and hearts.

The R. J. Ederer Company of Chicago, its dealers, and employees wish to extend to you and your families a very Merry Christmas and a Hearty New Year.



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FAO Meeting Points to Need For Preventing Surpluses

Speaking before the Fifth Session of the Food and Agriculture Organization (FAO) in Washington last month, Director-General Norris E. Dodd said: "We have been striving to integrate our program around the two great needs which confront Governments and their people.

"One of these great needs is to push forward as fast as possible toward economic development. If this is to come about, food and agricultural products must be more plentifully and efficiently produced where they are now insufficient. The fundamental well-being of people must be increased.

"The other great need is to gear the distribution of the products of farms, forests and fisheries more rationally to the world's production potentials, so as to avoid disastrous surpluses and resultant restrictive actions, even while millions remain unfed, unclothed and unsheltered.

"In line with these two main and related streams of action, we have tried to expand our technical advisory services to member Governments. We have brought Governments together for common action on common problems. We have, to the limit of our facilities, served Governments by gathering, analyzing and disseminating economic data. We have drawn up proposals for action to meet the growing commodity trade problems."

In its report to the FAO session, the Fisheries Panel stated: "The work of an international agency in the field of fisheries is made significant by the needs of the world for the types of products which are yielded by the large and only partially developed fisheries resources of the globe. At the same time, marketing problems are emerging for some countries which are already relatively well developed in this industry. Also, conservation problems are arising with respect to certain fisheries and in certain areas.

"With respect to the assembling of information about fishing methods and gear as the basis of a consulting service, it is recommended that FAO encourage the countries themselves to aid the program through exchanges of information. The Conference also draws attention to the fact that commodity studies are a useful approach to a better understanding of the flow of international trade in fisheries products.

"The Conference notes with satisfaction the progress made in establishing Regional Fisheries Councils. The Conference feels, however, that the Organization should give full consideration to work being carried on by International fisheries commissions or similar bodies already functioning.

"The Conference draws attention to the need for emphasizing the guidance of under-developed countries in the development of local fisheries for improved nutrition of local populations rather than for export.

"On technical assistance for economic development the Fisheries Panel considered that attention should first be given to an educational and training program, and that the principle of making capital grants to Governments for the provision of experimental fishing craft should be given further consideration."

One aspect of the FAO meeting, worthy of special attention, is the reference to the avoidance of surpluses, and the suggestion for developing fisheries to meet the local needs of foreign countries. This has particular application to the position of the United States fishing industry, which is faced with growing competition from foreign fishery imports.

We, of course, want to do all we can to help foreign countries increase their food production facilities so they can better feed their populations. But, when we have loaned them money and given them equipment and technical advice, they should not expect to turn around and flood our markets with fishery products which undersell domestic producers because of lower foreign labor costs.

It is realized that foreign countries are desirous of building a monetary reserve so they can buy equipment from us. Theoretically, that gives an overall balance of trade, despite the fact that some industries may be injured.

We believe a more realistic approach is needed. If our country does not want to maintain adequate tariffs or import quotas, we should ask that aid for foreign fisheries be used for increasing production to meet food requirements of foreign countries.

ATLANTIC FISHERMAN

REGISTERED U. S. PATENT OFFICE

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On Atlantic Coast, Gulf of Mexico, Great Lakes

VOL. XXX

DECEMBER 1949

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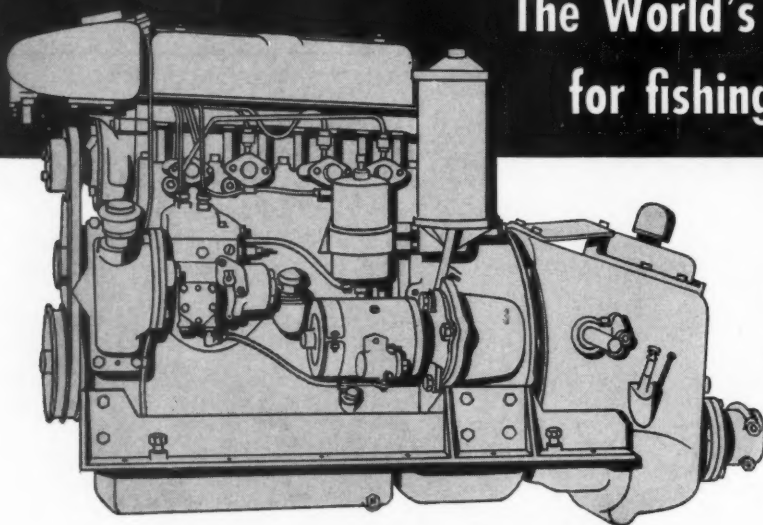
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The World's Finest Oils for fishing boat engines:



This ad is the third in a series featuring well-known marine engines. The engine shown here is the Graymarine Diesel, with twin-disc transmission, 4 cylinder, 35 hp, 1800 rpm.

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For gasoline engines

Gulfpride—Diesel

For Diesel engines

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Here's the important reason for their outstanding performance: extra refining by Gulf's exclusive Alchlor Process.

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Gulfpride-Marine is the recognized leader for gasoline engine lubrication. Its rich paraffin base, tough lubricating film, and great resistance to oxidation make it the finest for marine gasoline engines. This top quality oil has established hard-to-beat maintenance records.

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Use the Gulfpride oil best suited to your engine and get greater economy and dependability. For further information on these two great oils, call in a Gulf Lubrication Engineer today.

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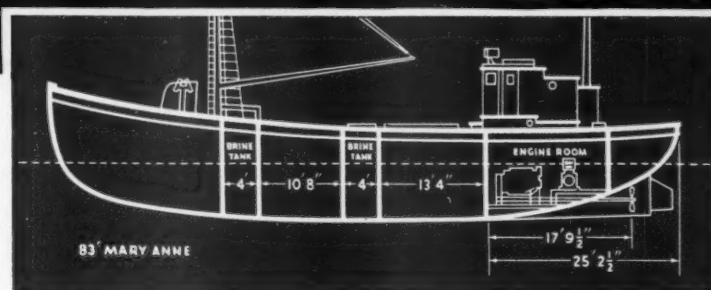
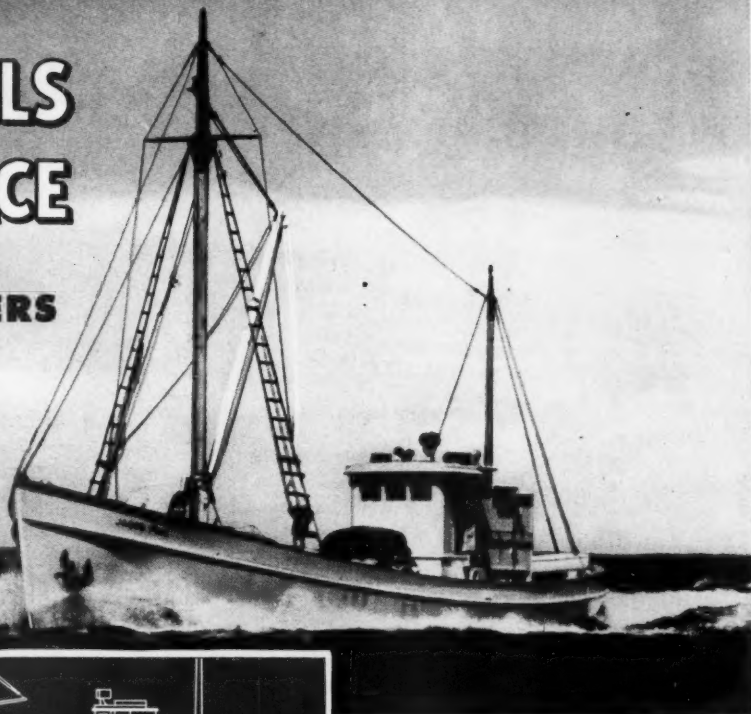
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GM DIESELS SAVE SPACE

**ON MODERN
SARDINE CARRIERS**



Reversed GM Diesel Twin installation in 83-ft. "Mary Anne" and "Jacob Pike" measures only 17' 9 1/2" from forward end of engine to end of propeller shaft. Boats owned by Holmes Packing Corp., Eastport, Me. Built by Newbert & Wallace, Thomaston, Me. Engines installed by Walter H. Moreton Corp., Cambridge, Mass.

FIRST refrigerated sardine carrier on the Atlantic Coast, the 83' "Mary Anne", has room in her holds for a 50-ton pay load—845 dry bushels in the forward hold, 738 in the after hold. Her sister ship, "Jacob Pike", is designed to hold 1470 bushels.

One reason for the enormous pay load capacity of these vessels is their General Motors Diesel power—a 322 s.h.p. Series 71 Twin 6 for propulsion, giving them a speed of better than 10 knots, and a 40 kw. GM auxiliary generating unit to operate the refrigerating equipment.

Compact, lighter-weight, these rugged 2-cycle Diesels can be tucked away in a smaller engine room—and that leaves more room in the boat for cargo.

Then besides, GM Diesels start easily with electric cranking. They're quick to pick up any load because there's power at every downstroke. And, of course, they use safe, economical Diesel fuel.

It will pay you to know all about these engines. Let us see that you get full details.

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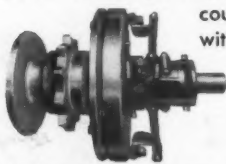
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Sounding-Lead

ANDERSON HEADS

FAO FISHERIES PANEL—A. W. Anderson, Chief of the Fish and Wildlife Service's Division of Commercial Fisheries, was unanimously elected Chairman of the Fisheries Panel at the F.A.O. Conference in Washington last month. He previously had been named reporter for the fisheries part of the F.A.O. program.

Other U. S. Government fishery representatives attending the meeting as advisers were Congressman Victor Wickersham of Oklahoma, a member of the House Committee on Merchant Marine and Fisheries; Dr. W. M. Chapman of the State Department; M. W. Waller of the Department of Commerce; and Edward W. Allen of Seattle, representing the International Halibut and Sockeye Salmon Commissions. Industry advisers were Charles E. Jackson of the National Fisheries Institute and Charles R. Carry of the National Cannery Association.

Fisheries Panel meetings were attended by representatives from Belgium, Canada, Denmark, Egypt, France, Indonesia, Ireland, Italy, Mexico, Netherlands, Norway, United Kingdom, United States, Uruguay, Venezuela, and the Supreme Commander for the Allied Powers (SCAP).

FAO voted to move its headquarters from Washington to Rome, but it is thought that a year may elapse before the permanent headquarters are set up at the new location because of the difficulty of securing office space.

The various phases of the fisheries work include the collection, analysis and dissemination of information; promotion of international consultation; plans and programs of Member Governments; and emphasis in development programs.

The Fisheries Panel stressed the fact that the importance attached to advisory and extension services in other fields applies equally to such services directed to fishermen.

The report of the Director of the Fisheries Division states that developments in the world fisheries indicate even greater production and economic expansion in this field. "For not only is there the necessity of lending a hand in the development of underexploited areas, but also there is the necessity of making objective observation of the trends and the nature of the problems that are present or are emerging from the more highly developed areas."

The Director-General presented a report on the proposed establishment of a regional fisheries council for the Mediterranean, and its establishment was approved.

NEW SAFETY RULES—As a means of preventing collisions at sea involving fishing craft, the Coast Guard has announced new regulations governing special day and night signals designed to minimize the danger to fishermen.

These regulations prescribe that all vessels or boats fishing with nets, lines, or trawls, when underway shall in daytime indicate their occupation to approaching vessels by displaying a basket where it can best be seen. If vessels or boats at anchor have their gear out they shall show the same signal on approach of other vessels, but in the direction from the anchor back toward the nets or gear.

CHAPMAN REPLACES KRUG—Oscar Chapman, former Undersecretary of the Interior, has been made Secretary, succeeding Julius A. Krug, who resigned as head of the Department last month. Chapman had immediate supervision over the work of the Fish & Wildlife Service for a number of years, and thus comes into office with a background of experience in the administration of fisheries affairs.

MORE FUNDS FOR RESEARCH—An increase of \$20,000 for operation of the *Albatross III*, the Fish & Wildlife Service's research vessel of the North Atlantic Fishery Investigations, Woods Hole, Mass., has been appropriated for this fiscal year. The added operating time will be spent in a series of cruises for two months in waters off the North Carolina coast and in hydrographic and

oceanographic studies on the trip to and from Morehead City, N. C.

Around 120 one-hour drags are planned, and an extensive tagging program is being arranged to provide knowledge concerning the migration pattern of fishes south of Cape Hatteras.

PACIFIC SARDINES STAGE COMEBACK—Sardines are running again off the Pacific coast after virtually disappearing, in commercial quantities, in the past three years. As mysteriously as they left coastal waters, the sardines, representing at one time the largest tonnage of fish caught off the American coast, have returned. The catch of approximately 500,000 tons in the 1945-46 season fell to less than 100,000 tons in subsequent years.

Large-scale studies, undertaken by Federal and State Governments to determine why the sardine yield was diminishing, still are in progress. The most ambitious investigation began last Spring when six specially fitted vessels studied marine life in coastal waters, especially off southern California.

Natural enemies of the sardine are other fish, notably the halibut. Then there is a mysterious phenomenon which destroys the sardine's hatching eggs. Nature of this egg-killing factor is being investigated.

Another adverse factor is overfishing. Admittedly much tonnage has been taken outside of areas over which conservation regulations operate. Whether the regulations have been strict enough to keep the species from declining has been a moot question for many years. It is argued that the return of the sardine this year represents merely the growth to maturity of a generation spawned before overfishing reduced the species.

FILLET IMPORTS—Imports of cod, haddock, hake, pollock, cusk and redfish fillets during October amounted to 6,181,411 lbs. This was 1% less than imports for the previous month. The first imports of fillets from the Netherlands occurred in October, when 20,845 lbs. were received at a West Coast port.

Total imports of these fillets during the first ten months of 1949 amounted to 41,140,450 lbs., compared with 47,567,597 lbs. received during the same period in 1948.

Exports of Norwegian frozen fish fillets have been mounting steadily during the past year, and shipments are presently reaching 12 foreign lands.

A comparatively new product since the war, frozen and packaged Norwegian fish to a value of \$7,000,000 has been exported during the past 12 months.

CANADIAN PRODUCTION—Landings of sea-fish during October in Canada (excluding Newfoundland) amounted to 124,130,000 lbs., an increase of 8.7% over the figure for October, 1948. The total for the ten months under review, 989,841,000 lbs., was still some 5.3% below that for the same period of last year.

Atlantic Coast landings amounted to 53,097,000 lbs., an increase of 18.4% over those of October, 1948. With the exception of haddock, greater quantities of groundfish were caught, but the cumulative total for these species is still well below the 1948 level.

More of the Atlantic cod catch is being salted—both wet and dried—and more haddock is being disposed of as fresh fillets. Also a greater percentage of the landings of tuna is being fresh dressed.

FISH PUMPING FROM SEA—Soviet scientists are experimenting with methods of commercial fishing without nets. The project involves the use of large pumps for pumping fish out of the sea, acoustic detection of schools of fish, and electric current to attract the fish to the submerged pump.

Research has indicated that fish will swim up an electrical current in the water the same way that they will swim against an actual water current. However, it is claimed that a fish pump by itself, no matter how powerful and even if it is placed in the midst of a school of fish, will only drive the fish away because they will swim away from the water current leading to its mouth.

On the other hand, if the submerged pump mouth is made an electrode for direct electrical current flow under water

(Continued on page 45)

ATLANTIC FISHERMAN—DECEMBER, 1949

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The outstanding six in the fishing field. Develops an HONEST 90 horsepower with ease and economy. 260 cu. in. piston displacement. Will last the life of your boat, thanks to 100% marine design and construction. It's BUILT for the sea, NOT CONVERTED for it!



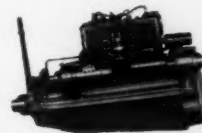
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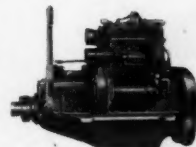
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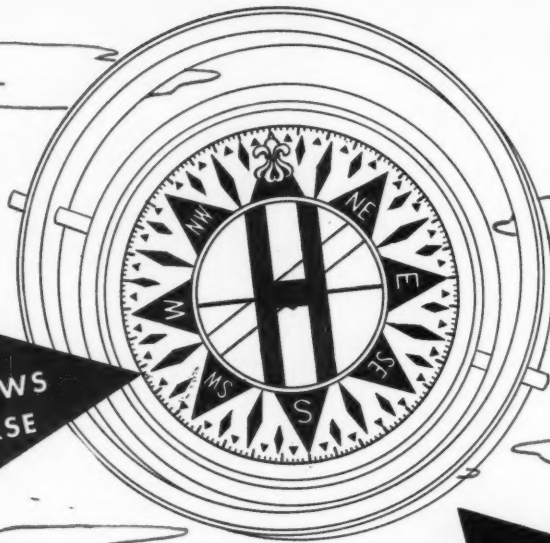
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THAT SHOWS
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ENTERPRISE POWERED

--for Tops in Tuna Tonnage



Mr. Edward Madruga, Owner and Captain of the Tuna Clipper Liberty, San Diego, Calif.

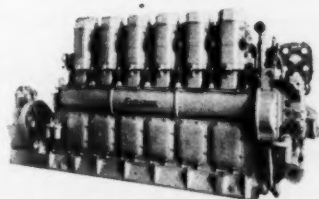


Tuna Clipper LIBERTY



It's no accident that owner-captain Ed Madruga's 100 ft. tuna clipper *Liberty* was High Boat in its class for the first eight months of the 1949 season. Trip after trip her Enterprise DMG-6 engine has taken her safely and speedily to and from the fishing grounds, her refrigerated wells bulging to capacity after each successful venture.

Leading craft like the *Liberty* offer positive proof of exceptional power performance in *results*. And the results are measured in continuously profitable fishing operations. So take a tip from the High Boat of San Diego's tuna fleet: specify an Enterprise Diesel for *your* next boat or repowering job—the choice of power experts.



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body when engine is hot. Help protect that all-important engine —USE **ESSO MARINE OIL!**

Remember—*everything depends* on your marine engine...getting to the fishing grounds...making the catch...getting back to market on time...**MAKING EVERY DAY PAY!**

YOU CAN DEPEND ON



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MARINE PRODUCTS

SOLD IN THE 16 STATES INDICATED

Winter Overhaul of Small Fishing Boats

By Capt. Elwell B. Thomas

MANY small lobstermen and draggers lay up for the Winter along about Thanksgiving time and it is during this period of lay-up that much work can be accomplished by an active man on an inactive boat.

It matters little whether the boat is stored ashore or afloat for the purposes of this article, due to the fact that it is becoming increasingly true that boats stored in yards are under a yard rule that all work from the rail down on the outside of the boat must be done by yard men and with material furnished by the yard. This is so because with the greatly increased cost of operating boatyards in the past few years in comparison to the small increase of hauling and storage charges, the yard must be guaranteed a certain amount of work on each boat stored to actually break even, let alone make any money on the deal. It becomes apparent, therefore, that whether stored afloat or ashore little if any work will be done by the owner below the rail, and we therefore can concern ourselves only with work which is on deck, above decks or below decks.

Checking Leaks

First in importance, I think, is to take advantage of the first hard rain and look for leaks in both cabin and hold. In doing this it is necessary not only to look for the obvious leaks such as from around a skylight or a seam in the middle of a deck over the hold, but also to patiently look for leaks in the more inaccessible places such as a trickle of water down the side of the stem or down the planking from a leaky covering board, or even around a loose bitt or samson post. Then again the leak may be around deckhouse windows or it may be around a house or coaming which is built of vertical t & g stock and allows water to work into the grooves and trickle along down to a sill or whatever.

Incidentally, if one finds that a canvas deck is leaking, he should not jump to the conclusion that the leak in the canvas is directly over the spot from which the water is dripping. If the canvas is not properly laid in paint or marine glue, it can be quite possible that the water has travelled down the sheer and crown of the deck several feet under the canvas before finally leaking through the wooden deck below. It is also possible that the wooden deck is of t & g stock and the water from this leak has followed along in a groove for some distance.

A vertical t & g leak in the side of a deckhouse may be checked a couple of inches above the deck by boring about three-quarters of the distance through the wood at the seam. If possible one should bore upward at a small angle as one bores in from outside the house. Having bored every seam of the house in this manner with, say, a $\frac{3}{8}$ " bit, and with the holes all at the same distance above the deck, you should whittle out smooth plugs (stopwaters) of white cedar or soft pine and drive them in the holes, sawing them off flush after driving them home.

Next fit a sheet lead flashing around the joint of house and deck, running the flashing up to the middle of the newly-driven stopwaters and probably as far out on deck. The flashing should be bedded in soft composition such as bottom seam composition and it is preferable to fasten it with escutcheon pins.

This repair is most effective and also looks well. The sheet lead is a long way ahead of either a copper flashing or wood quarter round for such a job.

If bitts leak, one should look them over with care for they may be loose in their partners or loose in their step, or both, and require careful attention to prevent the leak and also to make them trustworthy for use.

Wiring and Electricity

Having cured various leaks, it is well to give the engine the usual overhaul, and it might be well to rewire the entire engine while you are at it. As a matter of fact, it might be advisable to rewire the whole boat and check the condition of switches, light sockets (especially those of running lights), and wire connections. Also, determine whether the boat is properly wired. Many are not correctly wired, with the result that the electricity is inefficient and may be dangerous. If you are in doubt about



34' lobster boat owned by Capt. Herman Faulkingham of Prospect Harbor, Me., being overhauled and painted.

the wiring system of your boat, call in a first-class electrician who is familiar with marine work and have him check over the whole outfit.

In speaking of wiring and electricity, a very interesting post-war development for boats is the converter device on the market which in a single compact unit allows charging of batteries, use of the vessel voltage (6, 12 or 32 volts) without reliance on the vessel's batteries, and direct use of 110 volts from handy plug-ins on the unit. This unit, of course, is used when the vessel is alongside of the dock and the unit is plugged into the 110-volt current on the dock, with the exception that in some of the larger models it is possible at sea to convert the voltage of the vessel's system back to 110 volts. The small models of these converters are very handy on a laid-up boat where shore power is available, for it means that batteries can be left aboard all Winter, that the lighting system can be used as much as desired and that one has a handy plug-in for electric drills, etc.

Overhauling the Galley Stove

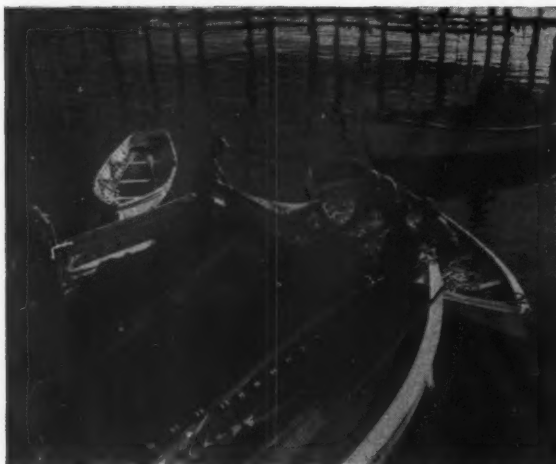
The galley stove should be thoroughly overhauled while the boat is laid up, for a dirty stove is a nuisance. If the fuel is other than coal or wood, it can be a positive menace. A liquid fuel stove should be thoroughly taken down and such new parts as are necessary should be ordered and installed. The whole stove then should be reassembled and stored in a clean dry place until the boat is again in commission. If the stove is used for heat occasionally while working on the boat, then one should use great care to keep it clean for the boat will be damp and frosty much of the time when no one is aboard and this will not improve the general condition of the stove.

If the boat is fitted with a coal and wood burning range, then it should be thoroughly cleaned. Standard equipment with these stoves is a gadget for cleaning out around the oven. It is a rod with a piece of sheet steel about $1\frac{1}{2}$ " by $3\frac{1}{2}$ " riveted 'thwartships across the end. If one does not have such a gadget, then it is well to build a similar doohickie and hunt around the stove for the little cleanout door and go to work. Also, at this time it is well to replace the stove bricks if necessary. The smokehead, the deckiron and all of the pipe may need attention. I have found it folly to use galvanized iron for this stuff. The difference in cost between galvanized iron and long-life metals is so little in comparison to the value of the vessel or boat that it is foolish to use the cheaper type with its frequent failure. Monel metal is excellent for this work.

In speaking of stoves, it is well to know that one of the manufacturers of wood and coal burning ranges has recently brought out a small stove suitable for either wood or coal. This stove has no oven so is therefore much smaller than even the smallest size range. The stove is useful in very small boats that do not have sufficient space for a range, as an auxiliary to liquid fuel stoves in larger boats, or for the large pilothouse, chart room or master's cabin, or possibly an engine room in a large vessel.

Now is a good time to repair or replace battered and worn hatch covers which are so common in small commercial fishermen.

(Continued on page 40)



Seining herring from a New Brunswick sardine weir. The nets are emptied into small boats from which the fish are later transferred to carriers that take them to the cannery.

Connors Brothers Have 21 Sardine Carriers

New Brunswick Concern Takes Fish From Over 200 Weirs

IN Passamaquoddy Bay, along the southern shore of New Brunswick, Canada, lies the greatest feeding ground in the North Atlantic, if not in the whole world, for the small herring known as sardines. And the physical structure of this bay coupled with the famous Fundy tides makes it possible to tap this treasure, one of the richest of the sea.

Feed is brought down into the Bay by several rivers. Near the mouths of these are many tree-clad islands forming narrow channels through which the mighty Fundy tides surge to and fro. Churning up the icy salt water from the depths, the tidal currents bring marine plants and microscopic organisms to the surface, ideal feed for the herring that come in countless millions.

This spot is the scene today of what is reputed to be the world's largest sardine packing plant. Founded in 1885 by the two Connors brothers, Lewis and Patrick, the firm has grown from practically nothing to the mammoth corporation of Connors

Brothers Limited, packers of over five hundred thousand cases of sardines annually. A. M. A. McLean is managing director while D. A. McLean is manager of the firm, located at Black's Harbour.

The process whereby the sardine is brought from the sea and packed for distribution all over the world is a unique and interesting story. The fish are taken fresh from the weirs, large horse-shoe-shaped contrivances consisting of long poles, sometimes forty feet and over, which are driven down into the mud, close together, and have a network of brush and twine, forming the trap.

Weirs usually cover an acre or more and cost between three and four thousand dollars. Many of them are quite an institution. They are built and owned by the fishermen and some remain in one family for generations. The Connors plant takes fish from over two hundred weirs, paying the fishermen who own the weirs for their services.

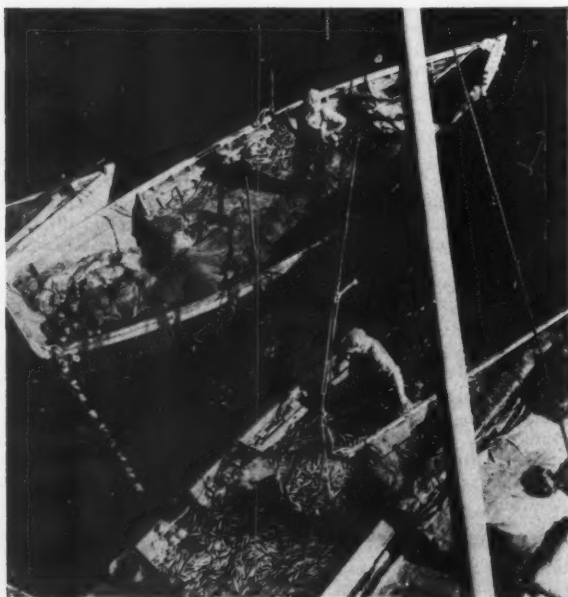
The fish swim to and fro with the tides in their quest for food. Some of the weirs are constructed so that the fish are caught on both flood and ebb tides; others are caught on the one tide only. This wholly depends upon the contour of the beach or island from which the weir is built, and the natural advantages always have to be taken into consideration when building a weir.

After the fish are in the weir at low tide a seine, weighted at the lower end, and with corks at the top, is let down into the water, and the fish completely encircled within it. Then, the bottom of the seine is drawn together with a drawrope, making a complete pocket for holding the fish. The local name for this type of seine is a "purse-seine." Having bagged up the fish, the next operation is to scoop them out of the water with a large dip-net and measure them into the sardine boat outside the weir.

Connors Bros. Limited own a fleet of twenty-one sardine carrying boats of from 8 to 65 tons each and a coastal steamer for carrying the finished product to the shipping points at St. John and St. Andrews, N. B. Nine of the larger boats are powered by "Caterpillar" Diesel marine engines. The sardine boats are built with a tank midway of the boat, usually of wood construction, in which the fish are kept in mild salt brine until their arrival at the factory.

Upon their arrival at the factory, the fish are immediately hoisted out of the boat and sluiced into tanks, being washed twice enroute and passed over a wire mesh which removes the scales not already removed at the weirs. The scales are diverted into a trough to be manufactured into essence of pearl and also as a fire extinguisher component. The tanks contain salt, and the fish being wet, make their own pickle.

From the brine tanks, the fish are brought upstairs in bucket elevators and washed again. Automatic machinery places the fish on flakes, so that no two fish overlap, thus giving each an equal



Catch of sardine herring ready to be taken from small boat and dumped into hold of sardine carrier.

exposure when the steaming process takes place. A flake is a piece of galvanized wire cloth, about 1/2 inch mesh, bound at the sides and ends by galvanized iron strips, each flake measuring 22 inches x 36 inches. The flakes are placed in racks, which have steel shelves holding twenty-five flakes. The racks are then placed in steel compartments, opening at both sides, and live steam introduced. After the fish have cooked for seven or eight minutes, the steam is shut off, and the doors opened.

The racks are taken from the steam box on the opposite side from that in which they entered, right into the drying room. Drying is accomplished by means of heated air being supplied to a blower fan at one end of the dryer, and the cool air drawn away by a suction fan at the other end.

When the fish are dry enough to be handled, they are taken from the dryer to the packing room, still on racks. There the flakes are fed on the endless belt conveyor which carries them to the packing tables, where several hundred white-capped and aproned women packers operate, two at each table. Here the fish are graded according to size and their heads and tails deftly snipped off with scissors. The women are incredibly fast at this work, many of them cutting up 2000-3000 fish per hour.

Two sets of automatic conveyors carry fish and cans to the packers—another set takes away the fish waste to the fishmeal plant. As the packers fill the cans they place them in shallow pans holding 25 cans, which are taken to the oiling machine.

Two men are required for the operation of the oiling machine. One passes the pans to a rocker arm conveyor which places the pan in position under the oiler tank. There, by a system of valves, the oil flows through a number of spouts, one for each can, in the bottom of the machine, until the exact quantity required is in each can. Then the valves shut and the rocker arm carries this panful forward and brings another into position. The second man takes the full cans away and again they are counted. This speedy machine actually places the oil in over 25,000 cans per hour. Sardines are packed not only in olive oil and vegetable salad oil; but also in tomato sauce and mustard sauce to cater to varying tastes. Then the tins are sealed by a huge sealing machine.

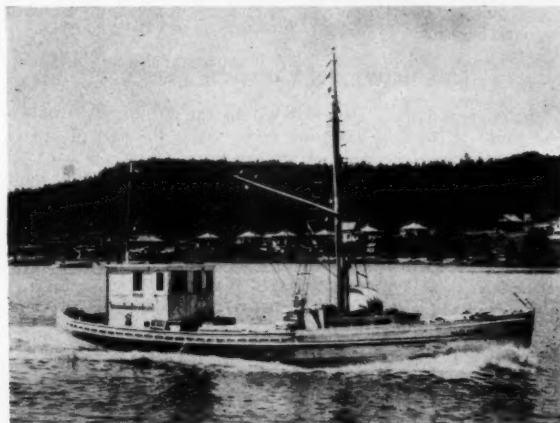
After this comes perhaps the most interesting stage in the processing of the sardine—sterilizing. From the sealers the packed tins come along in their miniature railway and slide into the mouth of the eleven retorts in the factory. The retorts are built with automatic recording thermometers which enable the operator to cook the cans for the correct length of time and at the proper temperature and steam pressure. Each retort holds 5000-7000 cans, and when full, the cans are cooked by steam for 35-45 minutes at a temperature which softens the backbone.

The cans, when cooked, are slightly cooled in the retorts by shutting off the steam and introducing water in limited quantity. Then they are taken out at the bottom of the retort and pass directly on a steel conveyor belt into a series of washing tanks. First washing is by a spray of hot water containing a cleansing agent to remove all traces of oil. Second washing is in pure hot water, which removes the cleanser.

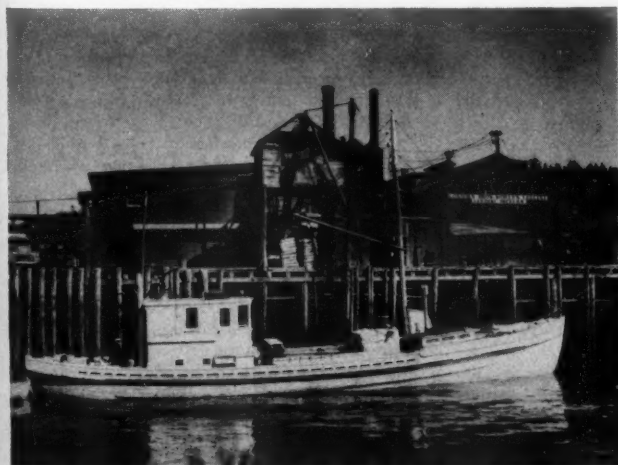
As the cans must cool before being put into boxes, they are left on the tables over night. The next day, they are packed 100 tins to the case, and are then ready for shipment.



Loading sardine carrier "Allan McLean" with herring which are being bailed from small boat.



The 75' x 15' x 4.5' sardine carrier "Allan McLean" of the Connors Brothers fleet. She is powered by a D13000 Caterpillar Diesel and skippered by Capt. Chauncey Stuart.



Left, a sardine carrier unloading at the Connors Brothers plant at Black's Harbor, N. B. Right, a sunfish caught by the "Allan McLean" crew in a weir.



Compass Deviation Errors Analyzed

By Egerton B. Sawtelle*

FREQUENTLY, a compass adjuster is asked how much error a certain piece of equipment will cause in a client's compass. This question has prompted the conducting of a simple quantitative analysis of the most troublesome kinds of compass deviation errors in motor vessels and the explaining of the causes of these errors. Then, the procedure for eliminating unruly deviation errors is given in each case considered.

Experience has shown that if the combined effect of the vessel herself and all installations causes a deviation error which is neither arbitrary in nature nor large in amount (appreciably over 20 degrees), this deviation error surely can be adjusted out satisfactorily. Otherwise, it is usually best to remove certain trouble-making equipment from the vicinity of the compass. Our chief concern is with the causes and amounts of deviation errors which are, or might become, arbitrarily variable in amount and what to do about the causes of such errors.

Personal experience has shown that the chief causes of troublesome compass deviation errors arise from placing the following equipment too near the magnetic compass:

1. Ammeters and their electrical wiring, as well as electrical wiring in general.
2. Medium steel tachometer cables, tachometers themselves, and gear shift levers.
3. Iron moving parts in steering wheels and attached mechanisms

Ammeters and Electrical Wiring

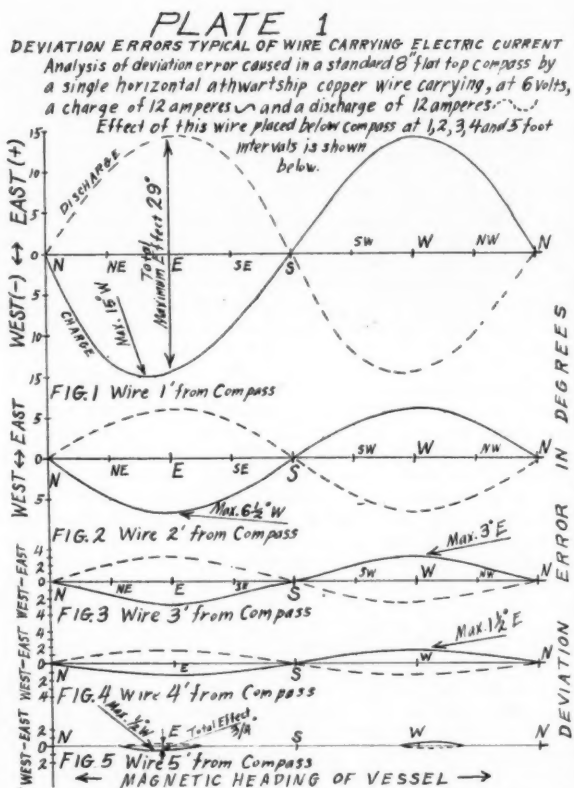
Ammeters and their electrical wiring can be a very troublesome cause of compass deviation error. Since the rate of charge of most generators depends on the condition of storage batteries and electrical load, the current in the ammeter circuit will vary from time to time. When this current varies, the current produced magnetic field surrounding the wiring and ammeter itself also varies. In order to have a compass that can be adjusted easily and that will be reliable in operation, it is imperative to keep ammeters at a proper distance. Twisting together the plus and minus wires leading to the ammeters eliminates the effect of the magnetic field surrounding the wiring. This procedure does not eliminate, however, the error-producing magnetic field set up around ammeter instruments themselves. This magnetic field is arbitrarily variable, as it depends on the amperes of current flowing in an ammeter.

Plate 1 shows the results of controlled experiments using a standard type 8" flat top compass mounted on a deviascope. Deviation errors, typical of those produced by a wire carrying electric current, were analyzed by means of a single horizontal athwartship copper wire carrying, at 6 volts, a charge of 12 amperes and then a discharge of 12 amperes. The deviation errors, produced in the compass by these currents, were obtained with this horizontal wire placed below the compass at 1, 2, 3, 4 and 5 foot intervals. On Plate 1, compass deviation errors are plotted vertically at every two points of correct magnetic heading measured horizontally. These plotted points are connected by smooth curves.

Figure 1 of Plate 1 shows that, when 1 foot below the compass, the current in the test wire produces a maximum deviation error of 15 degrees West. This condition results from a charge of 12 amperes when the vessel is heading ENE. The total maximum deviation error, however, falls at that point where the sum of errors caused by the charging and discharging currents is maximum. Note that this amounts to 29 degrees and occurs when the vessel is heading E.

Figures 2, 3 and 4 of Plate 1 show that, when at distances of 2, 3 and 4 feet below the compass, the current in the test wire produces maximum deviations of 6½ degrees, 3 degrees and 1½ degrees respectively. When the test wire is 5 feet from the compass, as shown in Figure 5 of Plate 1, the total maximum deviation error drops to only ¾ of a degree. This means that a change in current of from plus 12 amperes to minus 12 amperes will not produce a large enough total maximum deviation current to worry about. Bear in mind, however, that the test wire was placed 5 feet from the compass to achieve this ideal condition. This experiment proves the point that the plus and minus wires of each electrical circuit, passing within 5 feet of a magnetic compass, should be twisted together.

*Compass Adjuster—Freeport, Maine. This is the fourth and final article in a series discussing compass installation, adjustment and operation.



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Experiments with various types of ammeters do not give very conclusive results. These experiments were conducted with the wires to the ammeters twisted together so that the current in these wires would have no error-producing effect on the compass. Some ammeters showed comparatively little effect on the compass, even when carrying large currents. Other ammeters were found to be quite highly magnetized when carrying no current whatsoever. Magnetized ammeters can usually be demagnetized, or magnetized in the opposite sense, by reversing the normal flow of current in them for a period of time. Experiments indicate that many ammeters should be installed at least 2 to 3 feet from a magnetic compass, even though the plus and minus wires to these ammeters are twisted together.

Tachometer Cables and Gear Shift Levers

Plate 2 shows the results of a controlled experiment using a standard type 8" flat top compass mounted on a deviascope. Deviation errors, typical of those produced by 5 feet of vertical tachometer cable or 5 feet of a vertical medium steel gear shift lever, were analyzed by means of a 5 foot vertical rod of medium steel. The top of this rod was kept at the same elevation as the compass throughout the experiment.

The deviation errors produced in the compass were obtained by placing this vertical rod at 1, 2, 3, 4 and 5 foot intervals from the compass. This particular rod was picked because it produced results that represent a fair average of those obtained

by checking the results of numerous tachometer cables and gear shift levers. On Plate 2, compass deviation errors are plotted vertically at every two points of correct magnetic heading measured horizontally. These plotted points are connected by smooth curves.

It should be noted that the magnetic effect of this rod is partly due to vertical induced magnetism caused by the earth's magnetic field and partly due to transient magnetism produced by constant use of this bar in the same vertical position with regard to the earth's magnetic field. It might be argued that this rod may contain permanent magnetism, but it is better to play safe and be suspicious of the probable predominance of transient magnetism in the rod. In this experiment the rod was held vertically, with that end up which caused the greatest deviation error in the compass. The same end of this rod was up throughout the entire experiment.

Figure 1 of Plate 2 shows the deviation error produced in the compass by the vertical medium steel rod, when this rod is 1 foot from the compass. It will be noted that a maximum deviation error of 36 degrees West occurs when the vessel is heading approximately WSW. Figures 2, 3 and 4 of Plate 2 show that, when at distances of 2, 3 and 4 feet from the compass, the rod produces maximum deviations of 8 degrees, 4 degrees and 2 degrees respectively. When the rod is 5 feet from the compass, as shown in Figure 5 of Plate 2, this maximum deviation error drops to only $\frac{3}{4}$ of a degree. This means that the rod will not produce a large enough deviation error to worry about. Bear in mind, however, that the rod was placed 5 feet from the compass to achieve this ideal condition. This experiment proves the point that vertical medium steel such as tachometer cables and gear shift levers should be placed at least 5 feet from a magnetic compass.

If we could be sure that such equipment as the above did not contain transient magnetism, this equipment could be placed nearer the compass than 5 feet and the effect on the compass, caused thereby, probably could be adjusted out satisfactorily. However, as stated previously, it is not wise to depend on the fact that vertical iron, such as this, might be free of transient magnetism. Also, since vertical induced magnetism itself varies

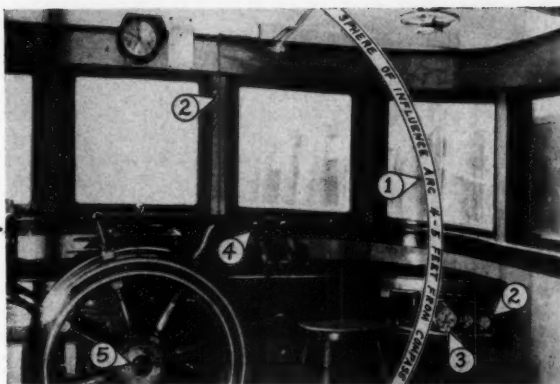


Plate 3. Practical results of compass deviation error analysis.

with magnetic latitude, placing such vertical iron at least 5 feet from the compass insures the compass against being disturbed by this variable magnetic field.

To be sure, in small boats it would not be practical to carry out these recommendations. It should be noted, however, that in such boats it would be very rare to find this type of vertical iron as much as 5 feet in length. A good general rule to follow is that vertical gear shift levers within 5 feet of a magnetic compass should be made of nonmagnetic material, such as bronze or brass.

The Tachometer Instrument

The tachometer instrument itself deserves some attention. Certain tachometers contain parts that may pick up and drop magnetism from time to time. If placed too near the compass, these tachometers would make accurate compass adjustment impossible and would cause the compass to be unreliable. Since the tachometer is at the upper end of its vertical cable, any medium steel parts that may be present in the instrument are likely to become magnetized from the magnetic influences originating in the cable.

Because of the various types of tachometers, magnetism tests with individual instruments do not give very conclusive results. However, as far as the tachometer itself is concerned, it appears that it should not be placed nearer the compass than 2 to 3 feet. Of course, if this instrument is at the upper end of a vertical cable which approaches being as much as 5 feet in length, then this instrument should not be mounted within a distance of 5 feet from the compass.

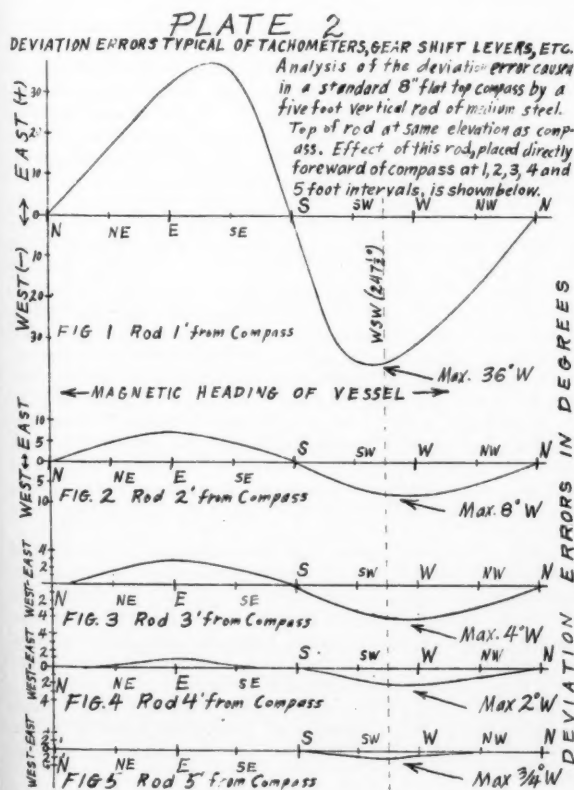
Experience combined with this quantitative analysis gives us the following general rule: keep engine instrument panels, containing ammeters and tachometers, at least 5 feet from the magnetic compass. On small boats, where vertical length of tachometer cables is considerably less than 5 feet, it may be that a distance of 2 to 3 feet from the compass will suffice. In any case, be sure that the plus and minus wires of each electrical circuit, passing within 5 feet of a magnetic compass, are twisted together.

Steering Wheels and Attached Mechanisms

Because of the unlimited possible arrangements of steering wheels and attached mechanisms, it is not practical to analyze, quantitatively, the deviation errors caused by iron in such equipment. The best general rule to follow is: use nonmagnetic materials, such as bronze or brass, for all moving parts in steering wheels and attached mechanisms within a distance of 5 feet from the magnetic compass.

Plate 3 shows the practical results of such an analysis as has been presented in this article. Note the following items in Plate 3:

- (1) Compass sphere of influence arc at a distance of 4 to 5 feet completely surrounding the compass.
- (2) Ammeter and attached wiring placed outside influence arc. In general, wiring may be run inside this sphere of influence if plus and minus leads of such circuits are twisted together.
- (3) Tachometer with vertical cable placed outside influence arc.
- (4) Engine controls placed inside influence arc, but made entirely of nonmagnetic materials.



Plastic Screening Used for Protecting Clam Spat

Important steps toward artificially protecting clam spat from predators in order to bring about a greater survival rate of the young clams, and in concentrating the spat in a given area to make possible more economical harvesting, have been made in experiments conducted at South Dartmouth, Mass.

Working with various screen materials which he used to cover the beds and protect the young clams, the late Morgan H. Plummer, a South Dartmouth, Mass. fisherman who had a life-long interest in clams, finally hit upon the use of a new plastic screening. The most important features of the screening are that it does not rust and deteriorate in the water, and crabs cannot get through it to the clam spat.

Harry J. Turner, Jr. and Dr. John C. Ayres of Woods Hole Oceanographic Institution, together with Charles L. Wheeler, State shellfish biologist for the Massachusetts Division of Marine Fisheries, examined Plummer's clam beds during the different seasons. They observed that his screen experiment "has given some rather startling results which may suggest how beds of clam seed may be protected artificially." Clams were present under the screen in large numbers. The density of the seed was approximately 175 per square foot.

In his experiments, Plummer used Lumite plastic screening, made of Dow's saran, and finally developed nine different methods of application. He tried the 18 by 14 mesh screening on wooden frames (along the planting unit type used by flower growers), as well as the 8 x 8 mesh natural-color screening, separately, and then together with the 18 x 14. He used the directly-on-the-clams coverage, the tent-like construction, the boxed frames, and stones along the sides.

The best result was obtained by using the 8 x 8 screening directly on the spat, with the 18 x 14 mesh on top, and the edges tucked into the mud about 6" deep. The spat attaches itself to the sand grains by its thread-like byssus and is held and protected by the screening.

After the clams began to grow, Plummer removed the finer mesh, 18 x 14, and left the 8 x 8 underneath. This allowed more water to circulate. The removed mesh can be installed over other beds, and therefore there is no waste.

The Lumite-screened clam plots were located at different positions on the grant to provide results from sandy bottom, mud, gravel, swift tide and wave action. As to the fabric itself, Plummer was able to determine the most suitable method with respect to wearing ability, abrasive ability, size of mesh and the best method of application, as well as the ability of the clam larvae to settle beneath the screening and be protected.

One of the most devastating enemies of the soft-shell clam is the horseshoe crab which can dig out and grind up the shells of an astonishing number of clams, leaving almost no trace of its work. Last year, an experimental bed in Barnstable Harbor was not only depleted of its clam population, but the extensive bur-



South Dartmouth, Mass. clam beds on which the new Lumite plastic screening has been used successfully for holding clam spat and protecting the clams from predators.

rowing of the crabs so softened the flat that the tidal currents washed and lowered it by approximately 2"

Blue claw crabs and fiddlers, restricted mostly to the region south of Cape Cod, do extensive damage principally to the young soft-shell clam while it is near the surface of the flats during the first year of its growth. In certain locations the oyster drill and cockles bore holes in the shell and suck out the soft interior. Blue mussels are known to take over certain flats to such an extent that the soft-shell clam population has been killed or smothered.

In addition to being interested in protecting the small clams from these predators, Plummer was also concerned about concentrating spat in one given area under screening, thus making possible economical harvesting. In the past, clam culturists and others interested in the shellfish business have tried to control and hold the spat of soft-shell clams and quahaugs, but these attempts have been largely unsuccessful.

It was Plummer's belief that with the concentrated set produced by his methods, the clam culturist could be assured of a good return on his initial investment and within a few years a sufficient number of towns could be shown the advantages of this research. He claimed that not only would a good revenue be forthcoming, but a sufficient number of clams could be raised for the commercial market which would in turn relieve the public flats of excessive clam digging and make them available for the individual family permit diggers.

F & W S Clam Investigations

In his July-September report, John B. Glud, chief of Clam Investigations for the Fish & Wildlife Service, Boothbay Harbor, Me., reports that horseshoe crabs almost completely wiped out the 30 bushels of clams planted in May and June near Parker Wildlife Refuge. Therefore, it was impossible to obtain yield data from various concentrations on different types of bottom.

To find a practical method of preventing this damage, Mr. Glud and his staff planted about five bushels of clams in a 20' x 20' enclosure, made of coarse mesh poultry fence, 3' wide. The bottom edge, buried 6" in the sandy flat, left a fence 2 1/2' high on a flat covered by 8 or 9' of water at high tide. Traps were built at two corners to catch crabs working along the fence. The top was not covered because of impracticability of doing so on large areas.

About 25 clams a square foot were broadcast on the exposed flat inside the fence. Test diggings indicated about the same concentration; no horseshoe crabs were found inside the fence or in the traps, though up to the end of August they were common outside. There were no decaying clams, and very little evidence of predation (only one drilled clam) was found. Green crabs were found, but evidently they did not remove many clams.

Though the experiment has not been continued long enough to be conclusive, it gives promise of keeping out horseshoe crabs. A more thorough test will be made next Summer when the crabs reappear.



Natural enemies of the soft-shell clam against a background of Lumite plastic screening.

Boston Line Trawler Locates Banks with Depth Recorder

Depth sounding equipment has demonstrated its value in improving fish catches in the Boston line trawler fleet, which operates from Packet Pier. The first of these boats, also called hookers, to be equipped with a depth recorder is the 40' *Josephine F.*, skippered by Capt. Sam Firicano. Owned by five brothers, all of whom are crew members, the boat recently was fitted with a Bendix Bantam recorder by Louis Posner Marine Radio Equipment Inc.

Posner gives the following account of a trip he made on the *Josephine F.*: "We left Boston at 8:30 Sunday morning, bound for Fippennies Bank, which is 50 miles E. ½ S. of Thatchers Buoy. The gang on deck was baiting up, and even the Captain was doing his share of baiting while steering the boat. They used mackerel for bait except for every twentieth hook, where they used a large frozen herring on a big hook for catching halibut. There was one boat, *Kid Pal*, ahead of us and one astern, *St. Theresa*.

"We started the Bendix Bantam Recorder coming out of the Harbor and registered six fathoms of water in the Channel. At 10 o'clock we had dinner on deck, and the recorder was going down all the time.

"Five miles before Thatchers Shoals, we came up a ridge of about ten fathoms. The Captain recognized it as good cusk bottom, a hard one to find with the sounding lead.

"We made Thatchers Buoy at 12 Noon, and were supposed to make Fippennies Bank at 6:30 P.M. So we shut off the Bendix, since there was no need to use up paper. At 5:30 P.M. we put the Bendix on, and picked up 85 fathoms of water climbing the ridge. Reaching 42 fathoms at 6:30 we kept on steering East, went over the ridge and turned back. We steamed North on the ridge and made 38 fathoms, which was the bottom we were looking for.

"We set 24 tubs of gear with engine full speed ahead and watched the Recorder. When we came to 43 fathoms, we turned around, setting the gear in a horseshoe and went back to 38 fathoms. After the gear was set, the Captain of the boat that was ahead of us came over to speak to us. He was sounding by hand and couldn't find the bottom. He was surprised to learn that we already had set our trawl.

"The *Josephine F.* returned to port at 2:00 A.M. Tuesday. She had 10,000 lbs. of fish, including 6,000 of haddock and 1000 of halibut, which is considered a very good trip."

In addition to being able to readily locate familiar grounds, the Bendix recorder has made it possible for the *Josephine F.* to find new spots where she had never fished before. The boat carries 25 tubs of trawl, each containing eight 50-fathom Burnham lines or a total of 400 fathoms per tub.

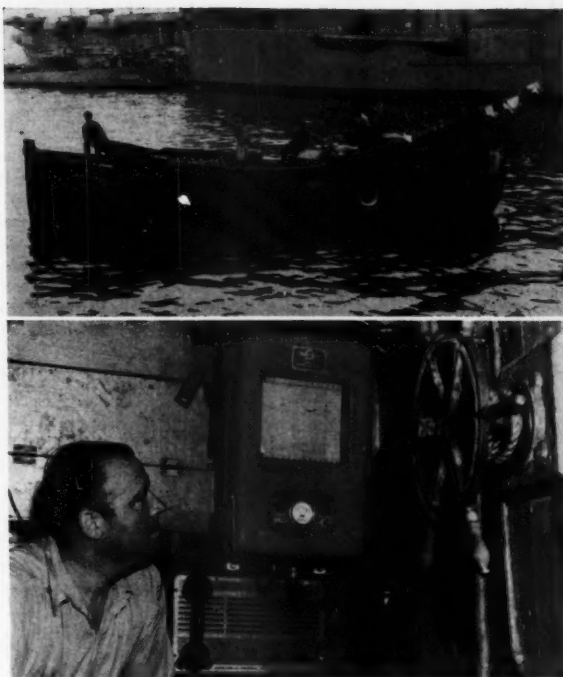
The *Josephine F.* is powered with a 65 hp. Osco Diesel, swinging a 32 x 29 Michigan propeller which gives a speed of 9 knots. With a 12' beam and a 5' draft, the boat has a fish hold capacity of 18,000 lbs. She uses Pflueger hooks, Columbian rope, and Gulf oil, and is equipped with a Ritchie compass and Hudson American radiotelephone.

The line trawlers have an average crew of 6 men and make about 2 trips per week. If they are not more than two hours' running time from shore after they set their trawl, the boats come back and return the next day to haul the fish. Otherwise they anchor out. The boats usually bring in from 8000 to 12000 lbs.

Another line trawler that has been equipped with a DR7, 100-fathom Bendix Recorder by Louis Posner is the 42' *I'm Alone*, owned by Capt. Charles Clyde Miller of Chatham, Mass. With a 3-man crew, this boat shared \$596 per man in 5 days of fishing. Recently when no other boats went out because it was too rough to sound by hand, the *I'm Alone* came in with 27 boxes of fish.

Wheeler Named Dept. Fisheries Biologist

Francis W. Sargent, director of the Division of Marine Fisheries of the Massachusetts Department of Conservation, has announced the appointment of Charles L. Wheeler of Falmouth as fisheries biologist in charge of research and development for the Division. Wheeler replaces Earnest W. Barnes of Roslindale, who



Top: 40' line trawler "Josephine F.", Capt. Sam Firicano, of Boston, Mass. Bottom: Louis Posner, electronic technician, looking at the boat's Bendix Bantam depth recorder.

recently retired from State service after having been employed 19 years. Matthew Pratt of Hamilton has been named assistant fisheries biologist.

Wheeler is a graduate of Harvard University where he studied fishery research and gained experience in his field working for the Smithsonian Institute at Washington, D. C. and for the past five and one-half years was connected with the Woods Hole Oceanographic Institute.

Pratt, a graduate of Vanderbilt University, gained experience in fisheries development as a field technician at the Smithsonian Institute and for four years was engaged in scientific research on fish and shellfish for the Fish & Wildlife Service at Woods Hole. During the past year Pratt served as coastal warden at Gloucester for the Department of Conservation.

New Propulsion Equipment for "Curlew"

Boston's 65' dragger *Curlew*, owned by two cousins both having the name Mario Costanzo, was repowered recently by Bethlehem's Atlantic Works in East Boston. Her new engine is a model NHMS, 175 hp., 1800 rpm. Cummins Diesel with 3:1 Snow-Nabstedt gear.

The boat also was fitted with new 2½" Monel shaft, 42 x 28 Columbian propeller, Maxim silencer, Hathaway winch, 1½ kw. Westinghouse generator and Type XH25 Surrette 32-volt batteries for engine starting and lighting.

"Famiglia" to Get New Diesel

The Boston dragger *Famiglia*, owned by Capt. Salvatore Passanisi, is to be repowered with a new 6-cylinder, 9 x 10½, Model 6KM668, direct reversible Atlas Diesel, rated 225 hp. at 600 rpm. The engine has built-in sailing clutch and 2:1 reduction gear and will swing a 56 x 52 three bladed Hyde propeller at 300 rpm. on a 4" Monel metal propeller shaft.

Due to its compact enbloc construction the new engine will actually occupy slightly less space than the old 135 hp. Atlas engine that it replaces in the *Famiglia*.

Booth Fisheries Buys "Mabel Mae"

The 93' steel dragger *Mabel Mae*, formerly owned by Capt. Elmer Jacobsen of Fairhaven, Mass., has been purchased by Booth Fisheries Corp., Boston. Capt. Anthony Parco will continue as skipper. Built by Electric Boat Co., Groton, Conn. in 1946, the *Mabel Mae* is powered with a 400 hp. Enterprise Diesel.

Maryland to Allow Big Dredge Boats in Somerset County

Big dredge boats are now allowed to work in Somerset County waters, following a decision on November 10 by Judge Edmund H. Johnson, in Princess Anne, that the law was very clear as to the rights of large boats to work in the County.

Heretofore, licensing of dredge boats to work in Somerset has been held to craft having a tonnage of not more than ten and one-half. But at the last session of the Maryland Legislature, the law pertaining to dredging was changed and Somerset County was not exempted from the use of big boats in its waters.

Judge Johnson's decision was the result of a test made of the law by smaller boat owners and watermen on the theory that possibly the old law could still be made to cover the case, and thus bar the bigger boats. Many watermen are alarmed over the situation, and say that the big boats will take about all the available oysters in the Sound before the first of the year, even though there is a fair to good supply which ordinarily would give work to the smaller dredgers all season.

Good Demand for Frozen Soft Crabs

The packers of Crisfield report that there is a good demand for frozen soft crabs. The last crab season was one of the best ever known, and large numbers of soft crabs were placed in cold storage.

Hard crab meat packing was still underway in November. Most of the crabs came from Virginia, where the catching of hard crabs is permitted the year around.

Comparison of Fall, Spring Oyster Planting

Upon recommendation of the Fish & Wildlife Service, Maryland began a pilot experiment this Fall to demonstrate the relative values of Fall oyster transplanting. Initial measurements at the seed bed were made. After transplanting, the damage was recorded and found to be about 19%.

In the Spring, an equal number of seed oysters will be transplanted to an adjacent bed and similar records made. From then until the oysters reach marketable size, rate of growth and mortality will be observed to evaluate results of the two periods of transplanting.

James B. Engle, chief, Chesapeake Shellfish Investigations, Annapolis, believes that the Fall is a more desirable time in which to move seed oysters. In the Spring, he claims, the larger seed suffers more damage because of its protrusion from the cultch than the smaller and flatter ones that grow closer to the shells.

The State of Maryland ordinarily transplants seed oysters only during early Spring. The reason, purely economical, is based upon the fact that a lull exists between the closing of the oyster season in April and the opening of the crab season.

Demand for Shucked Oyster Stock Improves

Since the opening of the oyster season on September 1, the weather has been extremely warm, and the demand for shucked stock has not been good. However, the last of November the weather became colder and the demand increased.

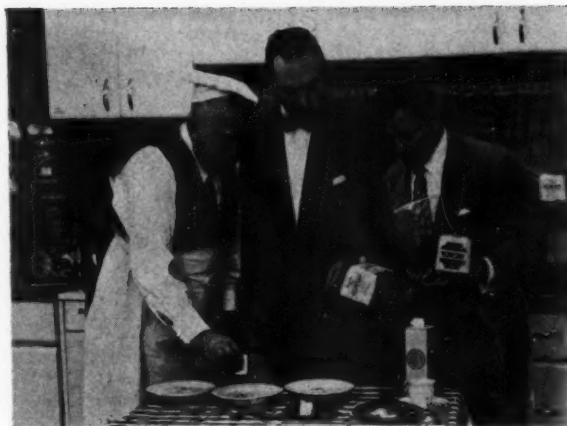
Oyster production during September and October totalled 403,723 bushels, a decrease of 49,560 bushels compared to the same period of the 1948-49 season. To offset the decrease, 110,426 bushels of out-of-State oysters were imported into Maryland. This was 38,222 bushels more than were imported in the same months last year.

The oyster yield in the Tangier Sound and Choptank River has fallen. There has been little natural replacement of oysters in Tangier Sound or the Potomac in recent years. In the Chester River, the oysters are of good quality and production is improving. This also is true of the tonging bars of Annapolis.

Sixteen dredge sailboats are working along the shore of Kent Island. These boats are getting between 100 and 200 bushels a day per boat. Oysters are selling for \$2.50 a bushel.

Blue Crab in Good Supply This Year

Contrary to popular belief, Maryland's blue crab is not disappearing, according to Dr. L. Eugene Cronin, a biologist of



On the DuMont Television System's program "Television Shopper" in New York City, Royal Toner, left, Chairman of the Public Relations Committee of the Oyster Institute, seasons an oyster stew he has just made.

the Maryland Department of Research and Education. In a recent lecture at Baltimore before the Natural History Society of Maryland, he asserted that an excellent supply of the crustacean is now available in the waters of the Chesapeake Bay.

Dr. Cronin explained that there seems to be a tremendous fluctuating supply, the number of crabs varying as much as 50% or even 100% in a year. He and other biologists are now trying to discover the causes of the fluctuations. The crab experts suspect that environmental conditions are somehow at the root of the puzzle rather than any factors attributable to man.

Connecticut to Combat Starfish

The Fish & Wildlife Service's shellfishery laboratory at Milford, Conn., will concentrate efforts during the next two months on cleaning up starfish. For several years, surveys showed the presence of two very large concentrations of starfish short distances outside the cultivated oyster area near New Haven, and these masses of starfish are now overrunning the oyster beds of the New Haven and West Haven areas. The Service will render emergency assistance during the critical period, in response to requests from the oyster growers.

In connection with the starfish situation, it is significant that the small non-commercial "coot" clam, which ordinarily is very common in Milford waters, has disappeared. It has played a definite role in the economy of Long Island Sound because it provided food for the masses of starfish concentrated on the uncultivated grounds. Since its disappearance, the starfish, searching for new food, have moved to the cultivated oyster beds.

Rhode Island Oyster Law Challenged

A Rhode Island law forbidding the use of shellfishing implements without permission on or over an oyster bed owned by or leased to another person was challenged as unconstitutional November 28 in Bristol District Court.

Joseph Fortin, Sr. of Tiverton was charged with violating Section 18 of Chapter 233 of the General Laws by having his dredge overboard while sailing over a bed leased to E. B. Blount & Sons. Fortin's lawyer, John C. Burke of Newport, called the law "invalid, illegal and unwarranted exercise of legislative authority" and in conflict with both State and Federal constitutions.

Judge James B. Linehan granted a defense motion for leave to withdraw the defendant's plea of not guilty and to file special pleas and ordered that arguments be heard December 5.

New Engine for "Jane Lorraine"

A new model NHRMS Cummins Diesel, rated 185 hp at 1800 rpm. for dragging service, recently was installed in the *Jane Lorraine*. Owned by Leon Champlin of Point Judith, the boat also has a new Snow-Nabstedt 2.5:1 reduction gear and Twin Disc front power take-off. Her tonnage is 12 net and 18 gross, and registered length is 41.7'.

New York Production Led by Menhaden and Oysters

The commercial production of fish and shellfish within the marine district including the offshore catch landed in New York State in 1948 totaled 308,770,000 lbs. valued at \$14,089,000. The yield was almost equally divided between fin-fish and shellfish, but the shellfish were valued at approximately \$10 million, whereas fin-fish were worth only about \$4 million.

Menhaden and porgies, with a total of 132,237,000 lbs., accounted for 85% of the total finfish landings. Yellowtail landings of 2,680,000 lbs., nearly all of which were caught beyond the three-mile jurisdictional limit, were next.

Oysters led in the shellfish division, with the 69,319,000 lb. take of these bivalves representing 45% of total shellfish production. The yield was greatest in Gardiners, Peconic and adjoining bays where it totaled 61,908,000 lbs. This area also had the largest catch of all varieties of shellfish, amounting to 40% of the whole production. Second position was held by hard clams, landings of which were about one-third of the total, with 53,547,000 lbs.

Fishery Council Television Publicity

The Fishery Council's recent radio and television publicity breaks for fish and shellfish included a guest appearance by Frank W. Wilkisson, president of the Council, on columnist Ed Sullivan's WPIX TV show, "Little Old New York". Mr. Wilkisson discussed fish and Fulton Fish Market with the N. Y. News columnist whose TV show is one of the most popular video programs.

Market Melodies, WJZ-TV, featured Mrs. Rose Pisacano of Libby's Restaurant preparing sizzling platters of swordfish, porgies and bluefish. She also made a seafood salad of crab meat, lobster, shrimp and oysters. While showing viewers how she cooked fish, Mrs. Pisacano related the merits of scallops, clams, smelts, halibut and salmon. The Council's "Fish 'n' Tips" cook book was offered. On another program, Market Melodies presented NYC Markets Commissioner Anthony Masciarelli as a guest of the Council.

Two Fishing Boats Sink

The 50' dragger *Rose W.*, owned by Capt. Philip Burch of Mamaroneck, sprang a leak and sank about 19 miles southwest of Montauk Point on November 3. Burch and his brother, William, abandoned the ship in a rubber raft, and were picked up by the Stonington, Conn., fishing vessel *Old Mystic*, skippered by Capt. George Berg. They were then transferred to a second boat, the *Marion H.*, and landed at Montauk Point.

Three young Bronx fishermen, who spent 36 hours adrift in their 34' disabled fishing boat *Meridan* off Long Island, arrived in Providence, R. I., November 6 aboard the tanker *Gulfoil* which rescued them. They were Herbert Horowitz and two brothers, Emil and Ernest Komyathy.

Rescue came when the crew of the tanker, en route from Port Arthur, Tex., to East Providence, spotted the trio's improvised emergency flares 60 miles south of Montauk Point. The *Meridan* sank shortly after its crew had been taken aboard the tanker.

Shelter Island Co. Marketing Oyster Puree

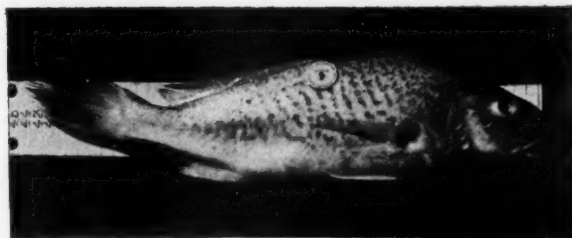
The Shelter Island Oyster Co., Greenport, is producing a new seafood product this season, oyster puree.

The oysters, freshly dredged from the beds of the Company, are brought to their plant at Greenport, where they are forced through a fine mesh screen. The concentrate is immediately processed and packed in 4½-ounce tins with an attractive green and yellow label, on which are several recipes for serving the product.

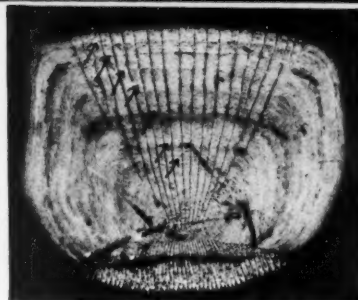
The contents of the can, mixed with a quart of hot milk and the proper flavorings makes an oyster stew. The puree can also be utilized as a bisque, gumbo, soufflé, fritters, oyster stuffing or croquettes.

Hanff to Build Party Boat

Hanff's Shipyard, Greenport is building a 44' party fishing boat for Capt. Harry Horton of Greenport. To be powered with a 150 hp. Superior Diesel, the boat will replace the 42' *Striper* which was destroyed by fire at Montauk in September.



Above: a tagged croaker. Right, an enlarged view of a croaker scale, showing the circular lines of growth, which are similar to "tree rings." Arrows point to denser lines which it is believed are formed annually and indicate age.



Croaker Tagging May Reveal Cause of Varying Supply

The general trend of the croaker fishery has caused concern to many fishermen in the Middle Atlantic area from New Jersey to Hatteras. Last August a large number of commercial fishermen in the Virginia area met at Old Point Comfort to discuss ways and means of "bringing the croaker back." One of the results of this meeting was to add impetus to an intensive survey of the croaker which already had been started by a team of fishery biologists representing the Maryland Department of Research and Education, the Virginia Fisheries Laboratory, and the U. S. Fish & Wildlife Service. Spearheaded from the Maryland Department of Research and Education headquarters at Solomons, Md., one phase of the study has included the tagging of about 1,500 croakers.

Some life-history facts about croakers and their movements are known and more are being uncovered as the survey progresses. Croakers are being tagged periodically in an effort to map out their movements and to determine how fast they grow. Two types of tags are being used: external and internal, and both have printed instructions on them for the finders. The external tag consists of two small plastic disks affixed to the back of the croaker (one visible on each side).

The internal tags are thin red plastic strips about ¼" wide which vary in length from 1¼"-1¾". This type of tag will be found in the body cavity of the fish when it is cleaned. The internal tag is being used principally on small fish, as it was felt that it would stay with the fish throughout later growth.

Fishermen who catch croakers are being requested to be on the lookout for tagged fish. When a tag is found it should be returned immediately to the U. S. Fish & Wildlife Service, Washington 25, D. C., along with information as to (1) date the fish was caught, (2) exact location it was caught, and (3) how it was caught. Each tag return will merit a reward of one dollar.

It is urged that anyone who captures a tagged fish should, if possible, measure it from tip of snout to tip of tail and scrape off a half dozen or so scales (preferably from the right side, midway of the body length, and 1" down from the back fin) and forward them to F&WS along with the tag and information.

When the biologists tag a croaker they measure the fish and remove two or three scales to be retained for later study. The researchers point out that it would be of great value to have a length measurement and a few scales taken from the same fish at the time of recapture. By comparing the two lengths, an idea could be obtained of rate of growth. A comparison of the two samples also would be helpful in working out a dependable method of reading the age of a croaker from its scales.

It is believed that cooperation between the fishermen and the agencies conducting the survey will result in progress toward determining the causes of the ups and downs of abundance.

Texas Commission to Study Migrations of Fish

The Texas Game, Fish and Oyster Commission has applied to the Corps of Engineers of the U. S. Army for a permit to install and operate a 20' x 95' fish trap near Rockport for the purpose of studying the migration of trout, redfish and flounder into and out of the bays along the coast.

The Commission proposes to install and operate the trap in Cedar Bayou adjacent to Grass Island between St. Joseph and Matagorda Islands. Two subsidiary wire curtains also would be operated in the Gulf of Mexico at the mouth of Cedar Bayou.

The proposed fish trap would be in operation for one week out of every four. During operation the trap would be attended so that gates could be opened to permit navigation of the channel at any time.

Shrimpers Go Back to Work

Shrimp boat operators from Freeport to Brownsville went back to work the latter part of November, following a temporary tie-up due to a price cut. The new price, a four-cent drop from 30 to 26¢ a pound for jumbo white shrimp, was posted simultaneously November 10 at docks up and down the coast. According to a Galveston dealer, the cut was necessary because Louisiana and Mississippi dealers had been operating with slashed prices since late October.

Prices in effect the latter part of November for white shrimp were: 26¢, (15-25 count); 21¢, (26-30 count); 17¢, (31-42 count); and 12¢, (42 count and over).

Shark Fishing

Milton Sanders, a commercial shark fisherman from the Florida coast, is now operating out of Rockport using his boat *Speedway*.

Scientists from the Texas Game, Fish & Oyster Commission who recently conducted experimental operations off the Texas coast have announced that there are enough shark in Gulf waters to support a profitable shark fishery.

Menhaden Plant for Sabine Pass Area

A second menhaden fisheries plant for Jefferson County, to be built in the Sabine Pass area, is in the offing. The plant will process menhaden, for the extraction of oils used in the manufacture of soaps and paints. A byproduct will be feed for chickens and hogs.

The new firm has a capital stock of about \$250,000. Ben Holter, a former employee of the Quinn Menhaden Fisheries, will be manager.

"Kilroy" Was There

The shrimp boat *Texas Star* sank in the Gulf recently when a north wind caught 90 to 100 shrimp trawlers at sea. The vessel's three-man crew was rescued by another trawler, the *Kilroy*.

Fishing Industry Valued at \$40,000,000

A survey just completed by biologist J. L. Baughman and his staff at the Rockport Marine Laboratory shows that the value of the fishing industry on the Texas coast has increased considerably during the past three or four years, and now amounts to more than \$40,000,000. Port Aransas, Rockport and Aransas Pass are among the areas with the greatest capital investment.

Port Lavaca Freezing Plant Leased

The City of Port Lavaca has leased the Municipal Freezing Plant to the U. S. Cold Storage Co. with headquarters at Dallas. This plant for some time has been the principal seafood freezing plant on the upper Texas coast. The capacity has been more than doubled since the plant was first constructed.

National Motor Boat Show, January 6-14

The 1950 National Motor Boat Show, sponsored by the National Association of Engine and Boat Manufacturers, will open at Grand Central Palace, New York City, on Friday evening, January 6. With the exception of Sunday, January 8, the show will extend through a nine-day run, closing Saturday night, January 14.



The "Blue Seal", 52' x 16'6" x 5'6" shrimp boat, owned by Capt. E. F. Falgout, inset, of Aransas Pass, Tex. She is powered by a D13000, 115 hp. Caterpillar Diesel.

Gulf October Shrimp Take Shows Gain of 25%

Totalling 66,000 bbls., October shrimp landings in the principal production areas of the Gulf were 25% more than in October, 1948. The catch for the first ten months of this year totalled 284,400 bbls., and showed a 28,000-bbl. gain over the same period of last year.

Fifty-six percent of the October shrimp catch was landed in Louisiana, with Texas accounting for 29%. Landings were heaviest in the New Orleans and Lower Mississippi River area, where the yield was 22,000 bbls. A Texas section, that of Port Isabel and Brownsville, took second place, having a catch of 8,500 bbls.

Although the October oyster take of 9,000 bbls. showed a 61% increase over the previous month, the yield was only about a third as large as in October of last year. Louisiana production, nearly all of which was in the New Orleans and Lower Mississippi River area, represented 82% of the entire October oyster take. Figures for the ten-month period of this year showed a decline of 2% from the same months of 1948.

Hard crab landings for October totalled 674,000 lbs., and were approximately the same as those of September, but 23% less than in October, 1948. With 321,000 lbs., the Morgan City, Berwick and Patterson region had nearly half of the October crab catch, and the State of Louisiana accounted for 94% of the total.

Crab production for the 10 months of 1949 totalled 8,927,000 lbs., and was only about three-fourths as much as in that period of last year.

Mullet, red snapper, spotted sea trout, grouper, white sea trout, flounder and red drum were the main species in October salt-water fish catch. Production amounted to 634,000 lbs., which was 94,000 lbs. more than September and 189,000 lbs. less than October, 1948. The catch was heaviest in the Mobile, Bayou LaBatre area of Alabama, where it totalled 338,000 lbs.

There was a jump of 18% in the 6,713,000-lb. salt-water fish catch landed in the first ten months of 1949.

Shrimp Pack Increasing

The pack of canned shrimp showed a remarkable increase during the month of November. Output of 21,385 cases in the week ending Nov. 19, for example, was double the same week a year before. On the first of December, the season's total pack was approximately 490,000 cases, or 8 percent greater than last year, whereas 6 weeks earlier this year it was 20 percent behind.

Alabama Has Big Oyster Harvest

Alabama's oyster harvest was larger during the last fiscal year than in any year since 1944-45, according to Conservation Director Bert E. Thomas. Tongers took 97,346 barrels of oysters

from Alabama waters during the year ended September 30. That was an increase of 27,708 barrels over the harvest for 1947-48.

During the year, 73,462 barrels of seed oysters were planted, compared with 18,950 barrels in 1947-48. The number of barrels of oyster shells planted was 22,286, and exceeded the total planted during the two previous years.

The shrimp harvest of 9,001 barrels was disappointing. Production was 13,691 barrels in 1947-48, and the biggest crop was harvested in 1941-42 when 21,092 barrels were taken.

The Seafood Division's revenue from collection of shrimp and oyster taxes rose from \$3,305 to \$4,001. State law requires that persons removing oysters from the State's coastal waters pay a tax of 3c on each barrel, while shrimpers are taxed 12c for each barrel of shrimp removed.

Fishing Good on Campeche Banks

Some 100 boats are now engaged in shuttling from home ports along the Gulf Coast to the Campeche Banks off the Mexican Coast to catch snapper and grouper. Mobile, Ala. fishermen report they are hauling in heavy catches.

The largest fishing fleet is located at Pensacola, Fla. Mobile, Panama City, Fla., and Galveston, Texas, are other fishing centers.

Biloxi Boats to Fish Florida Mackerel

Two Biloxi, Miss. fishing boats, the 28' *Beachcomber*, operated by Rene Meunier and Pat O'Neal, and the 40' *Mary*, operated by Frank Pates and Mack Unkrich, left the first of last month for Florida. They will engage in commercial king mackerel fishing from Clearwater to Key West. Last year Meunier caught over 7,000 lbs. of king mackerel off Florida.

"Saturday Evening Post" Article on Biloxi

For its seventy-sixth article in the series on America's most colorful cities, the *Saturday Evening Post* magazine featured Biloxi, Miss. Published in the December 3 issue, the article is by Harold H. Martin, and there are a number of color photographs, including an air view of Biloxi's water front and some of its shrimp and oyster boats, and a picture showing shrimp being unloaded on the Back Bay from the *Mary Evelyn*.

Louisiana King Mackerel Run Ends

The great run of king mackerel in Louisiana coastal waters this Fall was terminated by the advent of cold winds and lowering temperatures the middle of November. Spanish mackerel, too, appear to have left the coasts, to return next May or June. The king mackerel run of 1949 was by far the largest in history.

Co-op Buys Palmer Shrimp Co. Building

The Twin City Fishermen's Cooperative has purchased the G. L. Palmer Shrimp Co. building on the riverfront in Morgan City, La., and soon will start operating from this point.

Good Shrimp Catches

Fishing vessels reporting at Morgan City, La., with good catches of shrimp the middle of November included the *Polaris*, Capt. Chris Hansen, with 34 bbls.; *Riverside No. III*, Capt. Jeffrey Theriot, 25 bbls.; *Riverside No. IV*, Capt. Pete Lemmon, 21 bbls.; *Sonny*, Capt. Charles Landry, Sr., 21 bbls.; *Carlton Eacho*, Capt. Joe Theriot, 18 bbls.

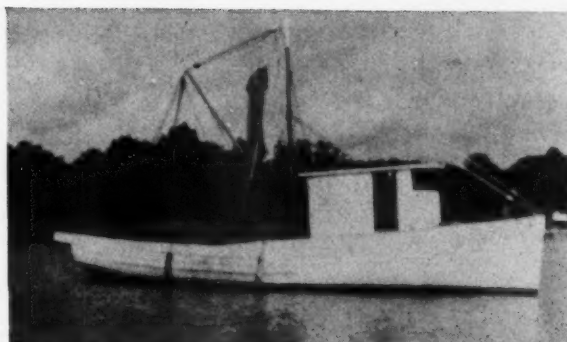
At Patterson, the *Invincible*, Capt. Jerry Rock, landed 30 bbls.; the *Butch*, Capt. Henry Farroba, 25 bbls.; and the *Tarpon*, Capt. Eli Fabre, 20 bbls.

"Oregon" to Base at Pascagoula, Miss.

Following a survey of port facilities in the Gulf, the Fish & Wildlife Service has announced selection of the port of Pascagoula, Miss. as a base of operation for the 100' exploratory fishing vessel *Oregon*. The craft was due in the Gulf about December 20 from Seattle by way of the Panama Canal.

After the vessel reaches her base port, repair and conversion work will be performed to adapt her for exploratory fishing, expected to begin in March, 1950. The boat, which was engaged in hunting for albacore tuna off the Alaskan Coast last Summer, carries a crew of seven and two engineer-biologists.

Fisheries experts expect the Gulf survey to reveal substantial new deep-water shrimp grounds, new menhaden resources and



The 42' shrimper "Eulalie" owned by Capt. Ellis Zirlott of Theodore, Ala. She has a 110 hp. Osco engine and Hyde propeller and uses Fittler rope and International paint.

possible species of tuna that can be exploited. The *Oregon* also hopes to develop new resources of red snapper, Spanish mackerel, flat fish and king mackerel. The vessel will work closely with the fishing industry, the Gulf States Marine Fisheries Commission, and representatives of Florida, Alabama, Mississippi, Louisiana and Texas.

Virginia Crabbers Make Good Catches off Tangier Island

Despite the lateness of the season, Tangier trotliners made some good catches of hard crabs during November in the waters adjacent to the Island. The month was almost as warm as a Summer month, and the trotliners caught from 800 to 1800 lbs. of crabs a day.

Tangier oystermen haven't been doing as well. Only one rock has been worked, Hurleys, a tonging rock just below the Virginia-Maryland line. The tongers made some fair catches on this rock, but none exceeded 8 bushels a day to the boat.

As a result, Tangier tongers plan to leave the Island for the third time this Fall to look for good oyster grounds. Some are going to the Wicomico River, on the Western Shore of Virginia; but most of them will sail for Nassawadox Creek, on the Eastern Shore of Virginia. Oyster beds in the Creek, planted with young growth some five years ago, were opened to all Virginia tongers on November 14 by the Virginia Fisheries Commission.

Pink-Gilled Oysters Ruled Fit for Consumption

Neither oyster mortalities in the Rappahannock River nor recent pink-gill conditions of some oysters harvested there have made the oysters unfit for human consumption, according to Dr. Nelson Marshall, director of the Virginia Fisheries Laboratory. The mortalities in question occurred last Summer, but did not draw public attention till Fall harvesting. The pink-gill, on the other hand, apparently reflects the type of food recently available to the oysters in their normal healthy feeding processes. The two conditions are not related, according to Dr. Marshall.

Dr. Marshall's statement followed a recent study and a conference between himself and Dr. J. D. Andrews, of the Virginia Fisheries Laboratory; James B. Engle, of the Fish & Wildlife Service; and Dr. Charles E. Renn, of Johns Hopkins University.

Hampton Roads Area Landings

Fish production in the Hampton Roads area of Virginia totaled 771,000 lbs. in November, which was an increase of 20% compared to October. However, the November, 1948 catch was nearly twice as large as that of the same month this year.

Scup landings were heaviest of all varieties, and the 216,000-lb. catch accounted for 28% of the total. Second position was taken by weakfish, with 160,000 lbs., followed by sea bass, with 159,000 lbs.

Whereas in October pound net landings accounted for over half of the yield, less than one-tenth of the November catch was made up of fish taken by pound nets.



Engineer Ben O'Reilly and the Model 31, 5-cylinder, 300 hp. Fairbanks-Morse Diesel with 2:1 reduction gear, aboard the 92' dragger "Vandal", owned by Harris Co., Portland, Me. Right, her skipper, Capt. Jens Buhelt, and the 250 lb. Maxim CQR



plow anchor. Recently reconditioned by Sample Shipyard, Boothbay Harbor, the vessel is equipped with Bendix depth recorder, RCA direction finder and loran, Hathaway winch, and Maxim silencer, and uses Esso fuel and lube oil.

Maine Lobster Catch Shows Increase

With the Maine lobster catch for October reaching a record 3,696,000 lbs., Sea and Shore Fisheries officials have predicted that 1949 landings of this species will hit an all-time high of 20,000,000 lbs. The catch for the first nine months of the year totalled 13,136,000 lbs., as compared with 10,365,000 lbs. for the same period in 1948, and income to the fishermen of \$4,797,000 was slightly higher. The best previous year in recent times was 1946, when the catch reached a total of over 19,000,000 lbs. Last year it fell to slightly over 15,000,000 lbs.

According to the Sea and Shore Fisheries Department, the figures are surprising in view of an abnormally small catch during the last Spring and Summer which affected the entire coast. Production started off heavily in September, despite a bait shortage, and has been continuing. The Department believes that enforcement of conservation laws, protection of egg-bearing lobsters and the releasing of thousands of Canadian seeders, oversized lobsters and shorts during the past few years had an important bearing on the increased catch.

The first nine months' landings of all species for 1949 were 200,000,000 lbs., or slightly under the 1948 figure. Total income to the fishermen was also off from \$11,176,000 in 1948 to \$10,775,000.

A revival of the menhaden fishery produced around 5,000,000 lbs. which went to by-products plants for fish meal, oil, etc. If the fish return to the coast again next Summer this activity is expected to be greatly increased.

Redfish landings are up 5,000,000 lbs. to a total of 46,657,000, while clam production remained approximately the same at 7,124,000 lbs. A large Fall herring catch brought this species up to sizable proportions with the heaviest poundage of any of the 34 edible fish products on the Department's list.

The crab catch of 473,000 lbs. for the first nine months was double that of 1948 and quahogs also doubled, reaching a production of 523,000 lbs.

Sardine Season Ends

The 1949 Maine sardine canning season drew to a close in November. Although this year's pack was not record-breaking as was the case in 1948 when production hit 3,400,000 cases, the cannerymen had a good season. The Fall was a very busy period, and during October there was a return to prewar standards of selection. The Maine pack is expected to wind up around 2,850,000 cases, roughly 10% less than last year.

Fishermen's Cooperatives Form Federation

The Federation of Maine Fishermen's Cooperatives was organized November 26 at a dinner meeting at Rockland, and

Cecil Jones, Pemaquid, was elected president. Elected to serve with Jones, manager of the Pemaquid Cooperative, were Al Haswell Turner, Pine Point, vice-president; and Stanley Tupper, Boothbay Harbor attorney, secretary-treasurer.

All Maine cooperatives were represented with delegates attending from Pemaquid, the Boothbay Region, Sebasco, Port Clyde, Stonington and Pine Point. By-laws were accepted at the meeting.

Jones summarized Canada's cooperative history, and Tupper, who presided, asserted that Maine's cooperative movement had reached the point where a Statewide organization was needed.

Morey Has New Scallop

Capt. Albert Morey of Rockland started fishing with his new 40' scalloper *Rose M.* early last month. The boat was built in Nova Scotia and is powered with a 143 hp. Chrysler Royal engine. She has a Hathaway Model 8234 winch which winds 175 fm. of $\frac{3}{8}$ " wire rope.

Brazier New Head General Seafoods Plant

James M. Brazier has succeeded Francis Perry as manager of the Fisheries Division of General Seafoods at Rockland, taking charge of the Company's Rockland fillet plant early in November. He has been associated with General Seafoods for several years, and comes to Rockland from the Gloucester plant.

Richard Feyler, Rockland plant production foreman, who resigned to enter the Rodney Feyler wholesale and retail fish and lobster plant with his father, has been succeeded by George Healey. Healey has been with General Seafoods for three years, holding the position of maintenance foreman of the plant.

New Engines for Two Carriers

Two sardine carriers owned by North Lubec Mfg. & Canning Co., and operated from North Lubec, are to be repowered with Buda Diesels. The engines were sold by Hunter Machine Co., Rockland, who will make the installations. A Model 844,6DCMR, rated 120 hp. at 1400 rpm., with 3:1 Snow-Nabstedt reduction gear, will go into the *Irma*. A Model 1125,8DCMR Buda, rated 160 hp. at 1400 rpm. with 2.5:1 Snow-Nabstedt gear will be installed in the *Muriel*.

Carrier "Ida Mae" Repowered

The sardine carrier *Ida Mae*, owned by Stinson Packing Co., Prospect Harbor, has been repowered with a model NHRMS, 230 hp. Cummins Diesel fitted with Snow-Nabstedt 3:1 reduction gear.

McLoon Purchases "St. Joseph III"

A. C. McLoon Co. of Rockland has bought the 65' Portland gill netter *St. Joseph III* from John Zappia for conversion to

New Jersey Clam Plant to Be Served by 12 Boats

A new fleet of 12 boats is operating out of Wildwood Crest, Cape May and Wildwood in the interests of the F. H. Snow Canning Company who have established a clam cannery at Wildwood-by-the-Sea Airport.

The Snow Company, which maintains headquarters at Pine Point, Maine, have leased the Bellanca aircraft building as the base of their operations in the Wildwood—Cape May area. Clams are trucked in from the nearby island of Wildwood and are canned from the raw product. They are placed on the market in a minced and chopped form.

William Kleb, manager of the plant, points out that their first full-scale operations will begin in early 1950. The Company spent well over \$40,000 in equipment and making necessary alterations to the building at Wildwood. Initial employment rolls at the Wildwood branch will total 75.

Clearance Gauges to Aid Waterway Traffic

Clearance gauges regarded as a boon to the large fleet of commercial boats in the Wildwood area, are slated for installation throughout New Jersey's inland waterway from Cape May to Manasquan. The gauges are being placed 1000 feet on either side of the 21 bridges spanning the waterway, and will inform pilots of the exact bridge clearance at all tide levels. Under the old system, pilots unfamiliar with bridge clearances, fearing damage to a boat's superstructure, caused numerous unnecessary span openings.

With completion of the new draw bridge into Wildwood next June, and the addition of the clearance gauges, 80 per cent of the commercial boats en route to Wildwood's Ottens Harbor will be able to pass without opening the bridge. The new bridge will have a water clearance of 25', compared to the 6' clearance of the old structure.

Wildwood Has New Fish Pounds

Wildwood Villas, N. J., is the site of a new series of fish pounds created by Roland W. Hill, a native of Greenbackville, Va., and his 18-year-old son, Roland, Jr. A veteran of over 30 years in the commercial fish business, Hill finally decided to establish his permanent residence and business in the Wildwood Villas area. Formerly of Ardmore, Pa., Hill was at one time employed with the Ike Cherry Company, Philadelphia. Shipments from his pounds supply fish for all the "Main Line" communities in wealthy suburban Philadelphia.

Wildwood Boats Add Depth-Finders

Among the latest Wildwood commercial fishing craft to add Bendix Depth Recording instruments are the *Betty R. Hansen* and the *Clipper*. The installations on these boats were made by Charles Rogers of Manasquan, N. J.

New Engine for "Jean Dare"

Capt. Earle Dare of Brielle, N. J. has had his 42-ft. party fishing boat *Jean Dare* repowered with a model 340, 135 hp. Nordberg engine with 1.88:1 reduction gear. Capt. Dare, who operates out of Stuart, Fla. in the Winter, has been in the business for 25 years, and holds several records for party boat catches.

a dry well lobster smack. She was built three years ago at the Carter yard in Friendship, and is similar to the firm's smack A. C. McLoon, built at the same yard a short time later. Power is supplied by a 114 hp. Superior Diesel engine. The craft has a hold capacity of about 30,000 lbs. of lobsters.

Morton Acquires "Gladys B."

Capt. Sam Morton of New Harbor has acquired the 45' x 13' x 3' seiner *Gladys B.* from Capt. Norman Stinson of Rockland, who had her built at Kennebunk last Summer. The boat can carry 500 fathoms of twine and a purse seine on deck and has hold capacity for 100 bags of salt. She has accommodations for 5, and is powered with a 165 hp. General Motors Diesel.



The 80' oyster schooner "Alert" owned by William B. Stowman of Stowman Brothers, Maurice River, N. J., and skippered by Frank Hinson. She is equipped with a 165 hp. Gray Diesel, 3:1 Twin Disc reduction gear, 38 x 28 Hyde propeller, and Columbian rope.

North Carolina Haul Seiners Make Large Catches

Between 30,000 and 35,000 lbs. of mullet were caught in a single haul at Holden Beach November 4. Capt. Hendrix Phelps and a crew of 15 men made the catch. Although they had volunteer assistance, it took all day to get the fish ashore and disposed of. Many more thousands of pounds of fish escaped back into the ocean through holes that burst in the net.

Other fisheries all along the coast made good daily catches during that week. Along with mullet, spot became numerous. Shallotte fishermen reported that the spot were unusually large and fat.

Salter Path, once isolated village on Bogue Banks, has in recent years become one of the most important fishing and seafood producing communities on the Carteret coast.

In a single day the first part of October, the fishing crews landed a total of 139,000 lbs. of mullet, spot and bluefish. Some weeks the total landings of fish in the Salter Path area are better than a million pounds.

Propose 16" Striped Bass Limit

North Carolina Wildlife Resources Commission members recently approved several minor alterations in regulations for the 1950 fishing season. Among the changes affecting commercial fishermen is one which raises the limit for the taking of striped bass from 12 to 16", provided that such an increase meets the approval of the Department of Conservation and Development. The striped bass is a commercial fish, but spawns inland.

Summer Conditions Unfavorable for Oysters

The past Summer conditions have not been favorable for oysters in some of the regions of Pamlico Sound. Unusual weather conditions, a rainfall of over 20" in June following floods of the previous Winter, lowered salinities to a danger point. Oyster sets were light; shell growth of adult oysters ceased during the Summer with the first signs of new shell growth showing up in October.

Wells Tests 4-Bladed Propellers

W. S. Wells, Southport seafood producer, recently made tests comparing the towing power of 3 and 4 blade propellers. Although most tugs have 4 bladed wheels, shrimp trawlers have used the 3 blade type.

Wells' *Claudia J.*, Capt. Frank Brown, and W. S. Wells, Capt. S. T. Bennett, both identical in size and power and with 3 blade propellers, were raced against each other and made the same speed. The *Claudia J.* then was fitted with a 4 bladed wheel, and in a second race far out-paced the W. S. Wells with her 3 blade wheel. Towing one boat against the other, stem to stern, produced the same result. It also was noted that with a 4 bladed propeller, vibration on the *Claudia J.* was virtually eliminated.



Capt. John Virkus, left, owner of shrimp trawler "Neilpar" and Capt. Frank Driggers of Jacksonville Yacht Storage Co., Jacksonville, Fla. where the vessel was equipped with a Bendix depth recorder.

Florida Meeting Discusses Fisheries Problems

The problems and conditions of the fishing industry were discussed at Miami Beach on November 15-18 when fish experts from all over the United States, Puerto Rico, Cuba and the Bahamas gathered for the second annual meeting of the Gulf and Caribbean Fisheries Institute.

One session was devoted specifically to marketing and transportation problems in both the Gulf and Caribbean area, and import and export developments in the Caribbean Islands also were discussed.

Other special sessions considered the oyster industry in the Gulf and Caribbean area. Among those who spoke on this subject were Dr. P. S. Galtsoff, Fish & Wildlife Service; R. M. Ingle, Florida Oyster Division; J. L. Baughman, Texas Game, Fish & Oyster Commission; and Dr. Lewis Radcliffe, director of the Oyster Institute of North America.

Representatives of Cuba and the Bahamas discussed their specific problems in the "Caribbean Fisheries Session," while the Louisiana menhaden industry, the Florida mullet fishery, and the Florida sponge industry were discussed in the "Gulf Fisheries Session."

The opening address was made by Dr. F. G. Walton Smith of the University of Miami's Marine Laboratory. He spoke on how the failure of the world's governments to face the population problem had increased the importance of proper control and development of fisheries.

Dr. Spencer A. Larsen, director, Air Cargo Research, Wayne University, Detroit, Mich., gave an address on the developments in his field. Dr. Larsen suggested marketing seafood by plane as a means of bringing an additional one-half billion pounds of fresh fish to consumers throughout the nation. He reported that experimental shipments of seafoods have demonstrated that the market quality can be improved tremendously by air-shipped precooled strictly fresh seafood in insulated containers.

Dr. Larsen asserted that costs of shipping by air have been reduced greatly, with the result that lobsters and other seafoods are being shipped from Newfoundland into Boston, New York, Cleveland, and other inland markets by American Airlines, while Meteor Airlines is operating from the Great Lakes into New York, flying as much as 50,000 to 75,000 lbs. of whitefish, pickerel, and other species weekly from ten different points in the Great Lakes area.

Dr. Larsen feels that the species most likely to lead the air cargo parade are sturgeon, brook trout, pompano, swordfish, whitefish, oysters, crabs, lobsters, scallops, clams, shrimp, flounder, and red snapper.

Big Catches of Mullet

The Raffield and Kilbourn fish markets at Port St. Joe had a large supply of mullet on November 14 after one of the biggest

catches made in a considerable time. The fish, mostly big ones and loaded with roe, were sighted at the mouth of the canal at Highland View, and in a little better than three and a half hours the fishermen had taken 50,500 lbs. The catch was made by five crews working under Carl Raffield, M. C. Wood, Bob Raffield, L. Wood and Henry Butts.

With mullet retailing at 25c per pound and roe in the neighborhood of 85c per pound, considerable money was made in a short time.

St. Petersburg fishermen made a rich haul of mullet on November 22 when they boated over 9,000 lbs. It was the largest catch reported this year, and was beached in the central area of Indian Rocks Beach's Gulf coastline.

To Survey Dead Oyster Beds Before Dredging

State Conservation officials planned to conduct a survey early in December to determine dead oyster beds in Pensacola Bay waters before a contract was let for oyster shell dredging operations.

Biologists say the taking of dead shells is a good industry under proper control, but warned that a potential \$4 million oyster industry in the Pensacola area could be ruined if surveys were not conducted to determine the dead areas.

The engineers and biologists have estimated that a valuable oyster industry could be built up in the Pensacola area by control of the pollution problem and scientific propagation of oysters. A great deal of cultivation and careful handling with the cooperation of local interests would be necessary to keep the waters permanently in production, according to the biologists.

Dr. Philip Butler, head of the Fish & Wildlife Service's experimental station on Santa Rosa Island, reports that there are 3,500 areas of theoretically useful waterbottoms in East Bay. He asserted that while only a small amount of this could be put into production, enough could probably be done in the next two years to put a number of oystermen back into business.

Purchase Shrimper "Assault" for Sharking

Robert C. Dorion, 22, of New York City, and Robert W. Neumann, 24, of Forest Hills, Long Island, N. Y., have purchased the Jacksonville shrimper *Assault* from the Seven Seas Fishing Co., and plan to use it for shark fishing out of Panama. They will make their base of operations in Panama City, on the Pacific side of the Canal.

Dorion and Neumann have spent the past year scouting out the shark business, touring the entire Caribbean area. They also spent two weeks in shark school at the Shark Industries Division of the Borden Co. at Stuart, Fla.

Capt. Guthrie to Have New Menhaden Boat

Capt. Willie Guthrie of Fernandina is having a 110' sub-chaser, the *Air Gannet*, converted into a menhaden boat. The new craft will replace the *Lynnhaven*, which was destroyed by fire in the Amelia River during August.

The *Air Gannet* has been at the Gibbs Corp. shipyard in Jacksonville, where the pilot house was moved 8' forward to make room for a midships fish well large enough to carry up to 350,000 porgies at a time. Engines were installed, and a tall steel mast was stepped with framework for a crow's nest on top.

Guthrie is supervising the installation of fish handling gear aboard the *Air Gannet* and the outfitting of a purse boat to help handle the 600-yard deep-sea nets which will go aboard. He fishes from the Nassau Oil and Fertilizer Co., Fernandina.

Shrimpers Get Depth Recorders

Bendix depth recorders have recently been installed by the Jacksonville Yacht Storage Company, Jacksonville, on the trawlers *Deep Water*, Mayport, owned by A. D. Smirch; the *Joe and Chickie*, Mayport, owned by J. J. Smirch; the *Sammy Jr.* and *Nina-E*, owned by Sam Vona of the Roland Fish Co.; and the *Neilpar*, owned by John Virkus, of Fort Pierce.

Georgia Fisherman Burned in Flash Fire

A gasoline flash fire aboard the shrimp boat *Little Flower*, which was at the King Shrimp Co. docks in Brunswick, Ga., burned veteran fisherman Emanuel Farrober about the face and arms November 9. Farrober was adjusting a small gasoline engine, used to generate electricity, when a spark apparently ignited fumes about the engine. Portable fire extinguishers doused the flames and reduced damage to the boat.

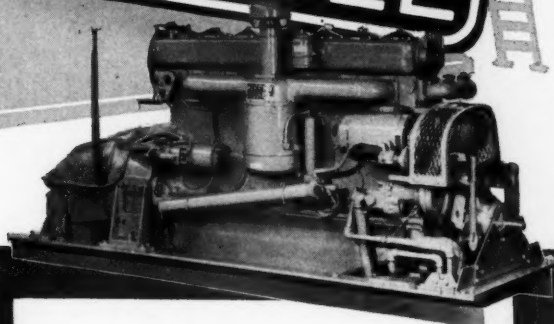
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Does it have through tie bolts from head to bearing caps?	YES	YES
Are camshafts driven from the flywheel end of the crankshaft?	YES	YES
Does it have a hydraulic servo-type governor?	YES	YES

Gloucester Seiners Make Late Mackerel Strike

The most mackerel for any one day in the past five months was brought into Gloucester and Boston November 19, when eight seiners accounted for 255,000 lbs. medium to large mackerel. The fish were caught during the night between Halfway Rock and Minots Light. Gloucester had six trips with 190,000 lbs., at 7½¢ a pound, while Boston took two fares with 65,000 lbs. at 8½¢ a pound. Best trip was that of the *Natale III*, which landed 55,000 lbs. at Gloucester, and gross stocked \$4,100.

Mackerel reappeared the middle of November after a period of three months during which no sizable trips were taken, and the fish were still being caught early in December. The first craft to make a catch was the *Eleanor*, Capt. Jimmy Ciaramitaro, which landed 25,000 lbs. large mackerel at Boston on No-



Capt. John Hudder of Gloucester, Mass. and his 43' gill netter, "Catherine". She is powered by a 110 hp. Model HRM-603 Cummins Diesel with Snow Nabstedt 3:1 reverse and reduction gear and front power take-off.

vember 16. She sold her fare for 15½¢ per pound, and grossed approximately \$3,875.

One of the biggest mackerel trips landed with a 60,000-lb. fare brought in November 17 by the seiner *Santo Antonino*, Capt. Johnnie Vidala. The fish brought 9¢ a pound.

Two Draggers Lost

The 81' fishing dragger *G. N. Soffron*, Capt. Everett Vannah, is a total loss after going ashore on Blanchard's Island, Brazil Rocks, near Shelburne, N. S. during a dense fog and gale on November 29. All hands were saved when they were picked up by a passing vessel.

Capt. Vannah reported that he was making land at the time of the accident to escape from the terrific gale that was raging. The dragger had a redfish trip aboard, and planned to continue the voyage home after weathering the gale at Port Latour. The vessel was launched at Essex in 1943 and was owned by John J. Burke, Jr., of Sherman B. Ruth, Inc., and William J. Brady.

The 80' dragger *Tina B.* of Gloucester was rammed and sunk by a New York garbage disposal vessel within 500' of piers in New York harbor on November 20. One of the dragger's crew, August Miguel, brother-in-law of the owner-skipper, Capt. Simplicio B. Bichao, of Gloucester, was drowned.

The *Tina B.* sailed from Gloucester on November 14 to spend the Winter dragging out of New York. She was inward bound with her first southern fare, 30,000 lbs. of fish, when she was rammed.

Draggers Fishing in South

Several Gloucester draggers are now fishing out of Southern ports, including the *Jorgina Silveira*, Capt. Alvaro Silveira, which is operating out of Portsmouth, Va.; *Portugal*, Capt. Albino M. Pereira, *Edith L. Boudreau*, and *Magellan*, all of which land their trips at Fulton Market, N. Y. Additional vessels are expected to leave for the South after the Christmas holidays.

Southern draggers which fished out of Gloucester this Summer have returned to their Winter haunts out of Hampton and Norfolk, Va.

Champion Tuna Fishermen

William "Doc" Stanwood and his partner, Dick Swan, both of Gloucester, were champion tuna fishermen of Cape Ann this summer. Fishing from their 35' boat *Aries*, they accounted for 44,630 lbs. of tuna.

Fisheries Association to Advertise Whiting

The Gloucester Fisheries Association plans to expend \$7,200 to advertise whiting, which is now in ample supply. Advertisements offering the Association's cookbook will appear in newspapers covering areas where it is desired to step up the sale of whiting.

"Friday Franks" Go on Sale

Gloucester's newest seafood product, "Friday Franks", went on sale on December 1 throughout New England and Westchester County, N. Y., when 1,000 outlets of First National stores offered canned frankfurters made of tuna fish. The new product is expected to greatly expand the market for tuna caught in New England waters.

John F. O'Hara, president of Davis Bros. Fisheries Co., Inc., producers of the nautical version of the hot dog, reported that production is now geared to a daily output of nearly 50,000 cans.

Burke Elected Mayor

Receiving a plurality of 1,073 votes in a hotly-contested four-way battle, John J. Burke, Jr., president of Sherman B. Ruth, Inc., and fishing vessel owner, was elected Mayor of Gloucester December 6.

South Carolina Court to Hear Shrimp Trawler Suit

Judge John J. Parker, senior U. S. Circuit Judge, has named District Judges J. Waites Waring and George Bell Timmerman to sit with him as a three-judge court in Charleston December 19 to hear a suit against the State Board of Fisheries, attacking constitutionality of the State's laws regulating the fishing industry.

The complaint was brought by E. B. Shipman and others engaged in commercial fishing, principally in the Beaufort area. It asks that a temporary restraining order be issued to prevent the State Board of Fisheries from enforcing certain regulatory measures enacted by the General Assembly at its last session.

The plaintiffs charge that since enactment of the law their boats have been seized and shrimp confiscated and sold. They allege that the State is without power to regulate their operations, since they are carried on at from one-half to 10 miles from shore.

Make Good Trout Catches at Myrtle Beach

Three Myrtle Beach fishermen, R. A. Bass, Sidney Harpe and Bobby Carr, recently caught 185 trout, averaging from one to two pounds, just over the breakers at Myrtle Beach within a period of five hours.

A total of 15 to 20 small fishing boats have been working daily in this vicinity, and all are reported to be making good catches.

Application for Oyster Grounds

The Gay Fish Co. of Frogmore, S. C. has applied to the State Board of Fisheries of South Carolina for a lease of all those salt water shores and flats suitable for cultivation and gathering of oysters in Wards Creek adjacent to Coffin Point on St. Helena Island and all of the oyster lands, east of Harbor River and Story River from Hunting Island Bridge to Fripp Island, in Beaufort County.

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Great Lakes Campaign Against Lampreys Being Organized

Dr. James W. Moffer, who has been head of fish investigations in California, has been appointed to head the Federal Government's attempt to eradicate the sea lamprey in the Great Lakes.

The Government is establishing three main bases for its scientific battle against the parasite which has played havoc with the trout supply of the Great Lakes. Campaign headquarters will be based at Ann Arbor, Mich., where Paul Thompson, assistant chief of fishery biology for the Fish & Wildlife Service, is stationed.

The fight also will be directed from major substations at Charlevoix, Mich., where six biologists and a ship brought from the Philippines and converted into a floating laboratory will carry out intensive work on the drive in the Upper Peninsula region. A site in Wisconsin on Lake Superior is yet to be selected.

The Fish & Wildlife Service is working closely with Ontario officials in connection with the matter. The Ontario commercial fishermen have also suffered in the destruction of the Lake Huron trout fishery, which now yields less than 5,000 lbs. a year, as compared to previous production of several million pounds.

Fishermen on Lamprey Committee

Governor Stevenson of Illinois has appointed Mathon Kyritsis and Henry Smith, Waukegan, Ill. commercial fishermen, to serve on the special fisheries study committee recently formed to help combat sea lampreys and pollution in Illinois waters of Lake Michigan.

Herring Harvest Expected To Be Sizable

This season's herring harvest from the Great Lakes is expected to go well over 20,000,000 lbs., and to be even larger than last year's catch. During November commercial fishermen took herring from Saginaw Bay on Lake Huron by the ton.

For the five-year period including 1947, herring production averaged more than five million lbs. yearly from Michigan waters alone. In 1948 it skyrocketed to 8,000,000 lbs. The bulk of the take, 7,000,000 lbs., came from Saginaw Bay on Lake Huron and Michigan waters of Lake Superior.

Make Fair Trout Lifts in Lake Superior

Following reopening of lake trout season, commercial netters on Lake Superior made some fairly good lifts. But lake trout fishing, generally, has not been good. Yields of other fish have been average for this time of the year.

Lake Michigan Chub Take Shows Increase

Chub production from Lake Michigan has gained impetus recently. Yields have increased more than 400%. The reason for this is that operators have been concentrating on chubs due to a scarcity of lake trout.

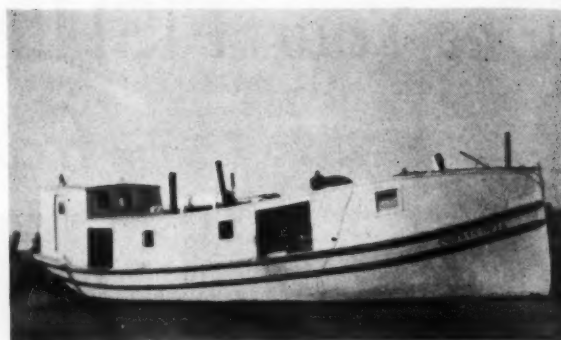
Edwin Carlson and his partner, Clarence Nash, fishermen operating out of Northport, Mich., got only one lake trout from the first lift of their nets on the opening day of the Lake Michigan trout season. They formerly caught anywhere from 1,000 lbs. to 4,000 lbs. of lake trout in a single lift. As a result of the poor catches, commercial fishing boats at Leland and Northport changed over to chub fishing when that season reopened on November 20.

Big Hauls of Whitefish in Lake Huron

Prior to the closing of the whitefish season in Lake Huron, trap and pound netters were producing good hauls of that species. The fish were smaller than Lake Superior whitefish, however. Rough fish yields are fair, and large quantities of chub have been taken in this area.

Lake Erie Production Good

General fish production from Lake Erie was good during November. A liberal supply of whitefish, pike and mixed fish



The 50' fishing tug "Cornucopia" owned by Mrs. Rosie Hanson of Cornucopia, Wisc. She has a Kahlenberg engine and Michigan propeller.

was landed in Ohio, Michigan, Pennsylvania and New York ports, and the Canadian commercial fishermen were doing even better.

Lake St. Clair is producing fairly good catches of suckers and carp. The fishermen are using seines for the suckers.

Fishermen Request Hatchery

Representatives of the Delta County, Mich. commercial fishing industry, including 300 operators and about 600 fish handlers, have suggested that the Federal Government locate the proposed lake trout hatchery for the Upper Peninsula in the Little or Big Bay de Noc area. They aver that this is a natural site for the hatchery, for which Congress appropriated \$92,500.

Fishermen in the northern Green Bay area, as well as a major portion of the Great Lakes fishermen, contend that if fish hatcheries help maintain the supply of game fish, they would also increase the supply of commercial fish in the Great Lakes waters.

The serious inroads of the sea lamprey on the lake trout in Lakes Huron and Michigan is a problem related to that of lake trout hatcheries. If lake trout are not reared and released it will take many years before natural reproduction replenishes the supply in the two Lakes.

It is significant to note that in Lake Erie where conservation departments in States bordering the Lake have reared and planted millions of whitefish and lake trout, the resources of these species have been maintained. Lake Huron and Lake Michigan, on the other hand, have had little or no hatchery reared fish to aid natural propagation.

New Fishing Boat Commissioned

Clarence Swaer, pound net fisherman of Garden, Mich., recently placed in service a new 30' all-steel fishing boat, equipped with a 135 hp. Nordberg gasoline engine. The craft was built by Arnold Johnson, Green Bay, Wis. Swaer's pound net operations will be on Green Bay waters and on Lake Michigan.

Get Illinois Fishing Licenses

Frank Eichler, Kenosha, Wis., and Matt and Tom Jensen, Racine, Wis., have taken out Illinois non-resident commercial fishing licenses. For the present, however, the fishermen will continue operations from Wisconsin ports. They will ply out of Waukegan, Ill., when operating in Illinois waters of Lake Michigan.

Moves Fish Tug to Lake Erie

The Doughboy Fish Co., Waukegan, Ill., has moved its all-steel gill net tug *Doughboy* to Sandusky, Ohio, where it is scheduled to fish for pike and perch. The move was forced by the fact that lake trout have virtually disappeared in Lake Michigan's Illinois waters, and the price of chubs is too low to make operations profitable for the firm. The *Doughboy II*, another steel gill netter owned and operated by the Company, is scheduled to operate out of Waukegan.

**What other Christmas present
can you name that...**



... you wouldn't want to exchange



... comes in so handy on rainy days



... never wears out



... keeps increasing in value

**... is so quick and easy to buy
... pleases everyone on your list
AND ... gives itself all over again
(with interest) ten years later?**



**U.S.
Savings Bonds**

Automatic Saving is Sure Saving



Contributed by this magazine in co-operation with the Magazine Publishers of America as a public service

Equipment and Supply Trade News

Additional information, and copies of catalogs and booklets mentioned, may be obtained on request from the addresses listed in the items or by writing Atlantic Fisherman, Goffstown, N. H.

Radiomarine Develops Small Radar

After more than two years of research, Radiomarine Corporation of America's engineers have developed a new small radar, designed especially for small craft such as fishing vessels.

The new model, known as "CR-103", is a 3.2-centimeter design. Although small in size, it has a 30 kw transmitter. It has the power and sensitivity to pick up ships or land at 20 miles as well as small buoys at close range. There are four range scales of 1, 3, 8 and 20 miles, which are calibrated in statute or nautical miles, with a close-in range of 75 yards from the antenna.

Consisting of three basic units—the Indicator, the Transmitter/Receiver and the Antenna Assembly—the new radar is designed to meet a variety of installation situations encountered aboard small craft where space and power supply are at a premium.

The Indicator can be mounted three ways—either from overhead, on a shelf or table, or on top of the Transmitter/Receiver cabinet. It thus takes up very little room in a small wheelhouse. The entire Indicator is mounted on an aluminum bracket and may be tilted and locked at any angle for convenient viewing.

The Transmitter/Receiver is easy to service. By removing the front cover direct access is obtained to all components mounted on a hinged panel. By opening this panel, access is obtained to parts mounted at the rear. The Receiver is of an entirely new design, possessing high sensitivity and improved automatic frequency control.

The 50-inch diameter, slotted, low wind resistance antenna provides a sharp 1.9 degree horizontal beam for high resolution plus a broad 20 degree vertical beam for rough weather. The antenna drive gears are enclosed in a weathertight cast aluminum housing. There are no tubes or similar electronic parts in the antenna, which weighs only 150 pounds.

One of the important features of the new radar which widens its application, is the fact that ship's line voltage is no longer a problem. The equipment operates from 24, 32, 115, 230 volts DC, or 115/230 volts 60 cycles. Complete information may be obtained from Radiomarine Corporation of America, 75 Varick St., New York 13, N. Y.

Columbian Nylon Products for Fishing

Additional information regarding the use of Columbian Nylon Rope in the fishing industry has been made available by Columbian Rope Company, Auburn, N. Y., who recently issued a folder on its Nylon products.

Nylon, when made into rope, retains all the inherent advantages of DuPont Nylon, and Columbian Nylon Rope has the added value of "Stabilization", an exclusive Columbian process—Patent No. 2343892. "Stabilization" makes a Nylon Rope that is easier to handle, easier to splice, firm, yet flexible. The strands



New Radiomarine small radar, Model DR-103.

are actually made to conform to the lay of the rope. There is a minimum of untwisting, fluffing and fraying when a length of Columbian "Stabilized" Nylon Rope is cut. It is also easier to knot and splice.

Long life, and resistance to abrasion, water absorption, marine rot or decay, make Columbian Nylon Rope adaptable for use as part of the fishing equipment or as lines aboard ship. Nylon hawsers and other lines are easy to handle, absorb little moisture, and can be stowed without drying.

Recent experiments conducted by Columbian show that Nylon for use in fishing nets assures long life, ease of handling and durability. For cod-end use, Nylon will outwear manila, sisal or cotton cod-ends by many trips.

Columbian Nylon Heading Twine withstands the ravages of salt water, marine organisms, and shows great resistance to the attack of lobsters, etc. It does not tighten up and pull staples or break.

Columbian's complete line of Nylon Fishing Cordage is available in two constructions, both made from pure virgin Nylon. Columbian Filament Nylon, made from long continuous filaments of original, white, silky Nylon, is best in appearance, texture, and strength.

Columbian Spun Nylon, the newest development in Columbian Nylon cordage, is not quite as luxurious in texture or appearance, which is traceable to the short staple lengths from which it is made. Nevertheless, the Spun Nylon is less slippery when wet and holds knots and splices more securely. Being 85% as strong as Filament Nylon, it far exceeds the strength in other vegetable fibre cordage.

Cunningham Air Whistle Bulletin

Cunningham Manufacturing Co., 4200 West Marginal Way, Seattle 6, Washington, has issued new bulletins describing its line of air whistles and accessories.

Cunningham whistles are made in a variety of sizes, with diaphragm diameters ranging from 3" to 12" and with overall lengths of from 4 1/4" to 40 1/4". Features of the whistles are clarity of tone, which is made possible by unobstructed passageway for the sound; steady pitch, regardless of changing air pressure or diaphragm tension; and operation at extremely low pressure.

The whistles are readily installed by simply extending a 1/2" or 3/4" air line to the desired location; and inserting an electrically or manually operated whistle valve. A solenoid valve is available for remote push button operation.

For air whistle installations where air supply is not available, Cunningham makes Electric-Air units in two sizes. These units are obtainable in any voltage and consist of a special type electric



Nylon heading twine made by Columbian Rope Co.

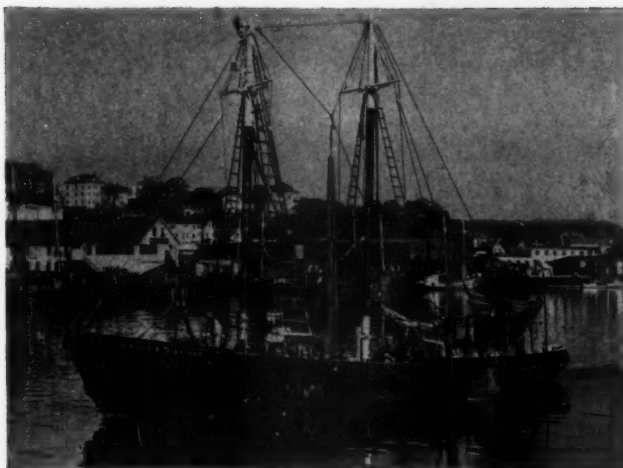
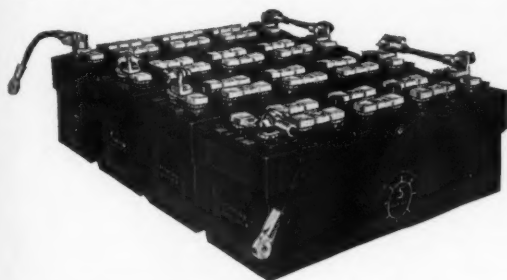
Surrette

SPECIAL SERVICE

MARINE BATTERIES

Used By
High-Line Swordfisherman
Evelyn G. Sears

High-line swordfisherman for this year is the "Evelyn G. Sears" of Gloucester, Mass., which during the season, brought in 406 fish, 118 of which were caught in one trip. Known from New Jersey to Nova Scotia, the "Sears" is owned by Capt. John J. Burke and skippered by Capt. Johnny Burnham. She is equipped with Surrette Special Service Marine batteries for maximum power and capacity in minimum space.



Every skipper recognizes the importance of dependable batteries. That is why more high-liners in the fishing fleet are equipped with Surrette Marine Batteries than any other make.

Specially built for Marine service, they deliver more power per pound of weight, have much greater ampere hour capacity size for size than the conventional Marine battery. Their modern design allows for greater battery capacity with relatively smaller displacement. Surrette Marine batteries are less expensive to use because they last longer.

Specify Surrette Marine batteries. Write for the name of your nearest distributor who is prepared to give you service.

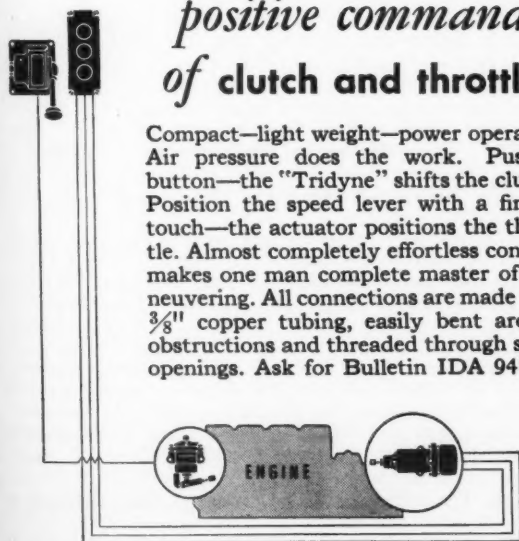
THE SURRETTE STORAGE BATTERY CO.
SALEM, MASSACHUSETTS



"Tridyne" MARINE CONTROLS

positive command
of clutch and throttle

Compact—light weight—power operated. Air pressure does the work. Push a button—the "Tridyne" shifts the clutch. Position the speed lever with a finger-touch—the actuator positions the throttle. Almost completely effortless control; makes one man complete master of maneuvering. All connections are made with $\frac{3}{8}$ " copper tubing, easily bent around obstructions and threaded through small openings. Ask for Bulletin IDA 9471-5.



Westinghouse Air Brake Co.

INDUSTRIAL DIVISION—WILMERDING, PA.

Improve Your Catch With High
Quality Starr Netting



Don't risk time and profit with faulty netting. Starr, makers of High Quality, Dependable gill and seine netting for over 50 years is your assurance of netting you can trust. Hold that catch. Say STARR and be sure.

STARR NETTING—
STAR PERFORMANCE
NYLON NETTING Now Available in a Wide Variety of Sizes



A. M. STARR NET CO.
EAST HAMPTON . . . CONN.

YOUR DOCK is OUR SHOP



When Your "Cat" Diesel Needs Quick Attention

Wherever you dock in the New York or Connecticut area, H. O. Penn Machinery Co.'s fast, efficient service is close by. A phone call is all that is needed to bring a Penn service expert, with full equipment to your craft to keep your fishing schedule on time. Quick service—right on your boat—by factory trained mechanics. Remember the H. O. Penn Machinery Co. service center near you next time your "Cat" engine needs quick attention.

H. O. Penn Machinery Co.

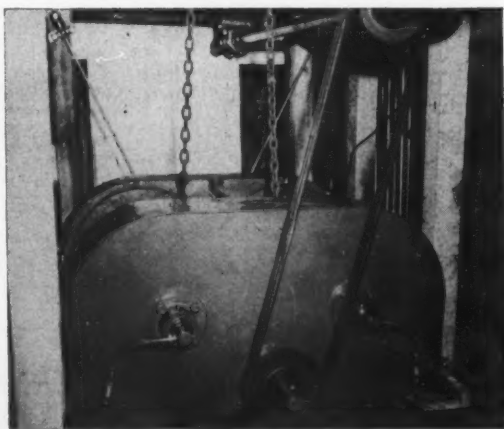
140th St. and East River
NEW YORK 54, N. Y.

Mineola, Long Island

Newington, Conn.

Poughkeepsie, N. Y.

NOW! AIR-CONTROLLED OYSTER WINDER



MODEL AF

Easier to operate. No ropes to pull.
Lengthens and takes up chain
automatically.

Revolutionary in operation

Write for particulars

Delaware Bay Shipbuilding Co., Inc.
Leesburg - - - - New Jersey

motor, housed in cast iron and coupled to a rotary compressor. They are equipped with relay and push button, are designed to operate with voltage fluctuations of plus or minus 10% of rating, and may be installed as far as 20' from the whistle.

Cunningham also makes automatic coding timers for repeat cycle operation, which are available in cast bronze water-tight cases. They can be fitted with three-handle-position switches or automatic start switches.

Socony Marine Division Promotions

J. E. Beale, manager of the New York City marine sales division of Socony-Vacuum Oil Company, Inc., has become special representative of the marine sales department at New York headquarters. He will assist the domestic sales manager.

R. C. Schnepf, who has been division marine manager in Baltimore, becomes manager of the New York City sales division, succeeding Mr. Beale. R. A. Wall, marine manager of the Port of New York, will succeed Mr. Schnepf as manager of the southeastern marine sales division with headquarters in Baltimore.

Stevens, Fairbanks-Morse Boston Manager

Russell A. Stevens, formerly Diesel Department Manager of the Fairbanks, Morse & Co., Los Angeles Branch, has been appointed Manager of the Company's Boston Branch House. He succeeds V. O. Harkness who has assumed the duties of Diesel Sales Department Manager for the Boston area.

Mr. Stevens joined the Fairbanks-Morse organization in 1934 and for several years was a Diesel field engineer in the southeast states, working out of the Atlanta Branch.

In 1943 he entered the U. S. Navy and was attached to the Bureau of Ships, Washington, D. C., as Lt. Commander in charge of internal combustion engine maintenance. Following World War II, he returned to Fairbanks-Morse & Co. as an assistant in the General Diesel Sales Division.



Russell A. Stevens

Ideal Windlass Moves Plant

Ideal Windlass Company of Attleboro, Mass. manufacturers of electric hoisting equipment for boats has moved to larger quarters in East Greenwich, R. I.

The new plant will provide facilities for the development and manufacture of larger commercial hoists, hydraulic driven windlasses, motor generators, etc. In addition Ideal now will carry galvanized anchor chain, shackles, chain stoppers and anchors.

Veteran Pflueger Officials Honored

Two men who have been with the Enterprise Mfg. Co., Akron, Ohio for 60 years were honored recently at a banquet held by the Company, which makes Pflueger fishing equipment. They are L. W. Griffiths, secretary, and Christian Schill, foreman of the sinker department. Each man was presented a \$500 Savings Bond by C. T. Pflueger, Company president.

Schill has been a foreman for 45 years. Griffiths rose from office boy of shipping clerk to travel representative and in 1919 to Secretary of the firm. The men have watched the Company grow from a small firm making harnesses to one of the world's largest fishing tackle and hook manufacturers.

Nylock Twine Used by Several Net Firms

To meet the demand for commercial fish nets made of Nylock, the new specially processed 100% Nylon twine, arrangements have been completed to supply quantities of the twine to leading net manufacturers. According to an announcement by Brownell & Co., Inc. of Moodus, Conn., sole distributors, and Heminway & Bartlett Mfg. Co. of Watertown, Conn., manufacturers of the twine, net makers who are now using Nylock include The Linen

Thread Co., Fish Net & Twine Co., R. J. Ederer Co., and Moodus Net & Twine Co.

Nylock netting does not need to be dried, will not mildew, is resistant to marine organisms, is not affected by gasoline or oil, and combines high tensile strength with light weight. The basic Nylon is specially processed by Heminway & Bartlett to eliminate stretch and knot slippage as well as to make it sun resistant. Originally successfully tested on the Great Lakes, Nylock nets now are being used on all coasts.

Ellis Heads Lister-Blackstone Sales

Captain R. M. Ellis, D. S. O., R. N. (Retired) has become British Factory Representative in the U. S. A. and Canada of the Lister and Blackstone group of Companies, and is also acting in charge of U. S. sales and service for Lister-Blackstone Diesel engines, including those built in this country. The appointment was announced by Walter K. Davies, president of Lister-Blackstone, Inc., 420 Lexington Avenue, New York City, wholly-owned subsidiary of R. A. Lister & Co., Ltd., of Dursley, England.



Capt. R. M. Ellis

Captain Ellis is an executive graduate of England's Naval College of Dartmouth and served in the Royal Navy on continuous assignments from 1915 until his retirement in 1947. After his basic training in mechanical and electrical engineering, physics, and naval construction, the course of his duties involved extensive studies of marine machinery and applied sciences.

Not long before the outbreak of World War II he commanded a destroyer division on the China Station, the cruiser *Suffolk* in 1941-42, the battleship *Queen Elizabeth* as flagship of the Eastern Fleet towards the end of the War in operations against the Japanese, and the new battleship *Howe* thereafter.

Captain Ellis' shore assignments have included deputy directorship of the Naval Air Division at the British Admiralty, during which service he spent some time in America on a special mission. He was Assistant Chief of Combined Operations to Admiral (then) Lord Louis Mountbatten, and subsequently Director of the Combined Operations Division at the British Admiralty, throughout the period of Allied landings in North Africa, Italy, and France. His responsibilities included the basic organization of the British landing ships, amphibious craft, and special units involved, totalling over 6000 vessels and seventy bases with their complements. The great majority of these vessels were Diesel-engine, and the general logistics of providing for their maintenance also fell to his Staff.

On retirement from the Navy, Captain Ellis spent some time in Birmingham with a foremost manufacturer of automotive and motor craft electrical equipment, in a working study of their large servicing organization. He then proceeded to the Lister and Blackstone Factories where he studied their production.

New Nordberg Engine Distributors

Marine Equipment & Supply Company, 116 Walnut St., Philadelphia, Penn. has been appointed distributors of Nordberg gasoline marine engines. The Company was established in 1910 and occupies its own five-story building with 30,000 sq. ft. of floor space. The Company has a complete line of Tobin bronze and Monel metal propeller shafting.

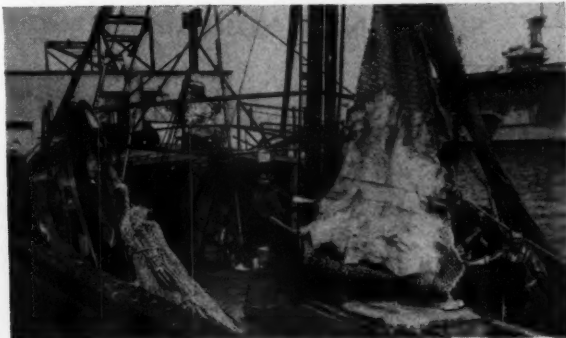
William Kirkland, president of Marine Equipment & Supply Co. joined the firm two months after it was organized. A. F. Giese, Jr., secretary and treasurer, and also in charge of sales, became associated with the Company three years ago, after being in charge of propeller sales for Federal Mogul Corp. of Detroit.

Duval Engine Company, 316 Plymouth Bldg., Cleveland, Ohio, has been made distributor for Nordberg Gasoline Marine Engines in Northeastern Ohio and Northwestern Pennsylvania.

Distributor appointments for the new Nordberg 4FS-1, single cylinder Diesel engine, announced by Harry M. Cahill, sales manager, Small Engine Department, Nordberg Mfg. Co., include Atlantic Engine Supply, Inc., Boston, Mass.; Bolinders Co., Inc., New York, N. Y.; and J. N. Vernam Company, Miami, Fla.

WESCO COD-END PROTECTOR

Has Extra Toughness to Reduce Fish Loss from Hide Failure



Wesco Cod-End Protector on Boston Trawler "Bonnie"

The Wesco Cod-End Protector will outwear 10 to 15 cod ends. Proven in actual use for 3 years, it has given 8 to 14 months' service, outlasting 20 to 25 salted green hides. Made with uniform holes punched, ready to attach to your net.

WESTERBEKE FISHING GEAR CO.

HEADQUARTERS FOR FISHING EQUIPMENT AND MARINE HARDWARE

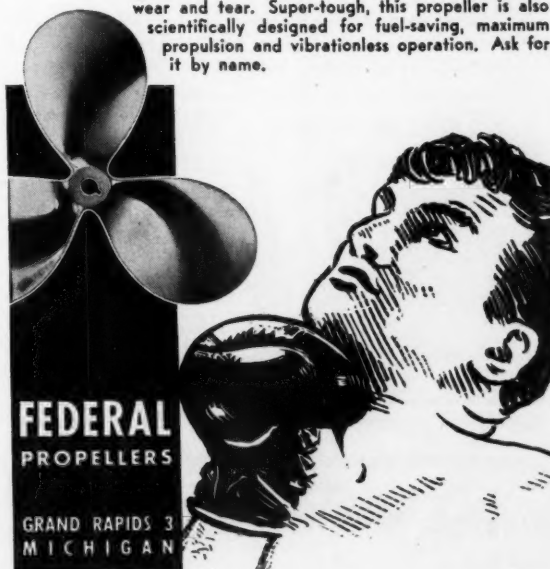
279 Northern Ave., Boston, Mass.

Branch Store and Warehouse at Gloucester

TRU-PITCH

can "TAKE IT"

Tru-Pitch survives the kind of punishment that knocks ordinary propellers for a loop . . . corrosive action, impact of floating objects, months of the hardest wear and tear. Super-tough, this propeller is also scientifically designed for fuel-saving, maximum propulsion and vibrationless operation. Ask for it by name.



FEDERAL PROPELLERS

GRAND RAPIDS 3 MICHIGAN

Fish Landings for Month of November

(Hailing fares. Figure after name indicates number of trips.)

NEW YORK

Blackhawk (2)	28,500	Mary Ellen (1)	15,000
Bonaker (1)	20,000	Paulina (2)	53,200
Edith L. Boudreau (2)	48,500	Portugal (2)	79,500
Felicia (1)	52,000	Sally & Eileen (3)	101,200
Gloria F. (1)	8,200	Sunapee (1)	25,000
John G. Murley (1)	40,000	Teresa & Jean (2)	99,000
Katie D. (1)	45,000	Virginia (2)	90,000
Magellan (2)	40,000		

Scallop Landings (Gallons)

Benjamin Brothers II (2)	825	Peerless (1)	350
Bright Moon (1)	900	Quest (1)	425
Buzz & Billy (2)	1,350	Reid (2)	791
Florence B. (2)	1,450	Richard Lance (2)	825
Friendship (2)	1,100	Rosalie F. (1)	700
Gud Kay (2)	608	St. Rita (2)	950
Hazel S. (1)	150	S #31 (2)	1,500
Julia K. (2)	586	The Queen (1)	371
Major J. Casey (1)	600	Theresa A. (1)	300
Mary (1)	600	Venture (1)	175
New Dawn (1)	400	Victoria (1)	500
Norland (1)	186	Whaling City (2)	950
Norseman (2)	880	Wm. D. Mangold (1)	500

GLOUCESTER

Agnes & Myrnie (3)	8,500	Kurta (2)	2,000
Albatross (2)	327,000	Lady of Good Voyage (1)	64,500
Alden (4)	93,000	Lasseghn (1)	3,000
Alice Ann (2)	178,000	Leretha (1)	6,000
Alvan T. Fuller (1)	96,000	Little Flower (4)	30,000
American Eagle (3)	36,000	Lois T. (2)	12,000
Anna Guarino (3)	7,000	Louise (1)	110,000
Annie (2)	11,000	Lousam (1)	3,000
Annie II (3)	11,500	Mabel Mae (1)	132,000
Anthony & Josephine (3)	24,000	Madonna X (3)	28,500
Ariel (2)	16,000	Madonna (2)	17,000
Assertive (2)	275,000	Malolo (2)	100,000
Atlantic (1)	28,500	Manuel F. Roderick (2)	171,500
Austin W. (2)	63,000	Margie & Roy (1)	2,000
Ave Maria (2)	245,000	Maria Immaculata (1)	6,000
Babe Sears (1)	115,000	Marie & Winifred (2)	110,000
Baby Rose (2)	213,000	Marion & Alice (1)	100,000
Barbara C. (3)	10,000	Mary (6)	40,000
Benjamin C. (2)	400,000	Mary A. (2)	13,000
B. Estelle Burke (2)	160,500	Mary & Josephine (1)	200,000
Bethulia (2)	17,000	Mary F. Curtis (2)	251,500
Bonaventure (2)	272,000	Mary Jane (2)	280,000
Brighton (2)	310,000	Mary Rose (1)	130,000
California (3)	75,000	Mary W. (3)	18,000
Calista D. Morrill (1)	3,000	Mother Ann (2)	369,000
Capt. Drum (2)	32,000	Nancy F. (1)	3,000
Carlo & Vince (3)	255,000	Natalie III (5)	105,000
Carol Ann (2)	316,000	New Bay (1)	75,000
Caroline & Mary (2)	154,000	No More (4)	21,500
Catherine Amiraule (1)	92,000	North Star (2)	38,000
Chanco (1)	145,000	Novelty (4)	32,000
Chebeague (3)	20,200	Nyoda (3)	23,000
Cigar Joe (4)	41,000	Paul Howard (2)	231,000
Columbia (2)	282,000	Philip & Grace (2)	253,000
Conquest (2)	210,000	Phyllis & Mary (1)	12,000
Curlew (1)	172,000	Pilgrim (2)	185,000
Dale (1)	6,000	P. K. Hunt (2)	196,000
Dartmouth (1)	105,000	Pollyanna (1)	120,000
Dawn (6)	32,000	Positive (2)	282,000
Dolphin (Glow.) (3)	310,000	Puritan (1)	109,000
Doris F. Amero (1)	92,000	Raymonde (1)	99,000
Eastern Point (5)	22,000	R. Eugene Ashley (2)	128,000
Eleanor (4)	331,500	Rita B. (1)	105,000
Emily Brown (2)	60,000	Ronald & Mary Jane (1)	155,000
Evalina M. Goulart (1)	39,000	Rose & Lucy (4)	41,500
Evelyn G. Sears (3)	400,000	Rosie & Gracie (5)	78,500
Felicia (2)	295,000	Sacred Heart (2)	4,000
Florence & Lee (2)	425,000	St. Anthony (1)	135,000
Flow (2)	37,000	St. John (3)	12,500
Frances R. (5)	6,000	St. Nicholas (1)	175,000
Frankie & Rose (1)	196,000	St. Peter (3)	28,000
Gaetano S. (2)	1,000	St. Peter II (1)	152,000
Gertrude E. (1)	143,000	St. Providenza (5)	41,000
Gloucester (1)	137,000	St. Rosalie (2)	20,000
Golden Eagle (1)	189,000	St. Victoria (2)	120,000
Hazel B. (2)	18,000	Santa Lucia (1)	4,000
Helen M. (1)	311,000	Santa Maria (6)	85,000
Hilda Garston (2)	252,000	Santo Antonino (2)	60,000
Holy Family (2)	111,000	Sea Hawk (1)	23,000
Ida & Joseph (7)	27,000	Sebastiana C. (1)	34,000
Immaculate Conception (3)	31,000	Serafina N. (4)	49,000
Irma Virginia (4)	86,500	Serafina II (3)	40,000
Jackie B. (5)	1,000	Skilligolee (2)	29,800
Jackson & Arthur (1)	48,500	Sunlight (2)	289,000
J. B. Junior (5)	25,000	Superior (1)	60,000
Jennie & Julia (3)	98,000	Sylvester Whalen (1)	161,000
Johnny Baby (4)	17,500	Theresa M. Boudreau (1)	137,000
Joseph & Lucia (1)	152,000	Thos. J. Carroll (2)	214,500
Joseph S. Mattos (1)	76,000	Tina B. (1)	82,000
Josie II (5)	20,500	Trimembral (1)	8,000
Junioles (3)	438,000	We Three (2)	11,500
Killarney (2)	290,000	Wild Duck (2)	255,000
Kingfisher (2)	297,000	Win Story (1)	3,000
		Yankee (1)	8,000

NEW BEDFORD

Adventurer (3)	63,500	June Bride (1)	15,500
Agda (3)	50,800	Katie D. (1)	56,500
Alva (2)	10,600	Kelbarsam (2)	19,700
Angeline (1)	5,500	Little Chief (2)	10,400
Angenette (2)	13,800	Little Joe (3)	25,700
Anna C. Perry (2)	22,200	Lucky (3)	25,600
Ann & Marie (4)	16,900	Madeline (3)	25,000
Annie Louise (3)	39,800	Marg-E (2)	11,500
Annie M. Jackson (2)	27,100	Maria Julia (4)	47,200
Arnold (2)	21,800	Mary & Joan (2)	84,200
Arthur L. (3)	84,000	Mary & Julia (3)	123,800
Barbara C. Angell (2)	97,200	Mary Anne (2)	81,100
Barbara M. (2)	28,000	Mary J. Hayes (3)	125,900
Bozo (2)	19,200	Mary M. (4)	27,100
Capt. Deebold (3)	85,200	Minnie V. (3)	24,000
Carlannul (1)	6,000	Molly & Jane (4)	74,900
Carl Henry (2)	57,700	Noreen (3)	93,300
Carole June (1)	12,200	North Wind (1)	9,800
Catherine T. (2)	60,800	Paulina (1)	42,000
Charles E. Beckman (3)	38,600	Pauline H. (2)	85,500
Charlotte (1)	14,700	Penguin (2)	44,500
Christina J. (2)	55,400	Phyllis J. (3)	38,500
Clinton (2)	15,800	Plymouth Belle (1)	13,000
Clipper (3)	117,700	Princess (2)	23,800
Connie F. (1)	19,000	Quest (1)	9,300
C. R. & M. (2)	39,700	Reliance (2)	9,200
Dauntless (3)	32,700	Reneva (1)	8,500
Doris Gertrude (4)	89,000	Rita (2)	34,600
Driftwood (1)	4,500	Rosemarie V. (4)	50,100
Ebenezer (1)	2,100	Russell S. (2)	25,600
Edith (3)	29,400	Sandra & Jean (4)	74,500
Elva & Estelle (3)	55,800	Santina (2)	16,800
Etta K. (3)	50,100	Sea Fox (1)	12,200
Eugene & Rose (3)	54,300	Sea Ranger (3)	81,500
Eunice-Lillian (1)	32,000	Solveig J. (3)	105,400
Gannet (2)	89,900	Southern Cross (1)	21,800
Gertrude D. (3)	62,000	Stanley B. Butler (3)	133,200
Glady & Mary (2)	64,500	Susie O. Carver (3)	43,000
Growler (2)	43,500	Theresa (2)	22,300
Helen B. (4)	79,000	Theresa (Conn.) (2)	28,700
Invader (3)	67,900	Theresa & Jean (1)	20,800
Irene (1)	7,000	Two Brothers (NBD) (3)	28,300
Ivanhoe (2)	49,200	Two Brothers (R. I.) (2)	25,000
Jacintha (3)	117,000	Victor Johnson (2)	41,000
Janet Elise (3)	18,100	Viking (Chilmark) (1)	4,900
Joan & Ursula (3)	89,100	Viking (NBD) (4)	105,900
John G. Murley (2)	55,000	Wamsutta (2)	44,700
Johnny Ryan (1)	7,400	Whaler (3)	114,800
Josephine & Mary (3)	101,300	Yankee (1)	11,100

Scallop Landings (Gallons)

Abram H. (3)	2,900	Louis A. Thebaud (3)	2,000
Adele K. (2)	1,250	Malene & Marie (2)	2,100
Alice J. Hathaway (1)	350	Malvina B. (1)	1,050
Alpar (2)	2,000	Maridor (2)	1,150
Amelia (2)	2,050	Marie & Katherine (3)	2,400
Antonina (2)	1,950	Marmax (2)	1,800
Antonio (2)	1,650	Martha E. Murley (2)	1,700
Barbara (2)	1,100	Mary Canas (2)	1,700
Bobby & Harvey (2)	1,750	Mary D'Eon (2)	1,700
Bright Star (2)	1,200	Mary J. Landry (2)	1,650
Camden (2)	1,400	Mary R. Millins (2)	1,250
Carol & Estelle (2)	2,000	Mary Tapper (3)	2,200
Catherine & Mary (2)	1,850	Moonlight (1)	1,000
Charles S. Ashley (2)	1,850	Muriel & Russell (1)	800
Dagney (2)	1,550	New Dawn (1)	525
Dorothy & Mary (3)	3,050	Newfoundland (3)	1,900
Elizabeth M. (2)	1,850	Olive M. Williams (2)	2,200
Fairhaven (2)	700	Palestine (2)	2,200
Flamingo (2)	1,950	Pearl Harbor (3)	2,450
Fleet Wing (3)	400	Pelican (2)	2,000
Four Sisters (2)	1,725	Porpoise (3)	2,850
Francis J. Manta (2)	1,150	Red Start (1)	1,045
Friendship (2)	1,900	St. Ann (2)	1,708
Hope (2)	260	Shannon (2)	1,160
Irene & Mabel (1)	900	Smilyn (2)	2,000
Janet & Jean (2)	1,950	The Friars (3)	2,150
Jerry & Jimmy (2)	2,200	Ursula M. Norton (2)	1,550
Kingfisher (3)	2,300	Virginia & Joan (2)	14,000
Lainee K. (2)	965	Wm. D. Eldridge (2)	2,000
Linus S. Eldridge (3)	2,450	Wm. H. Killigrew (3)	3,250
		Wm. J. Landry (2)	1,800

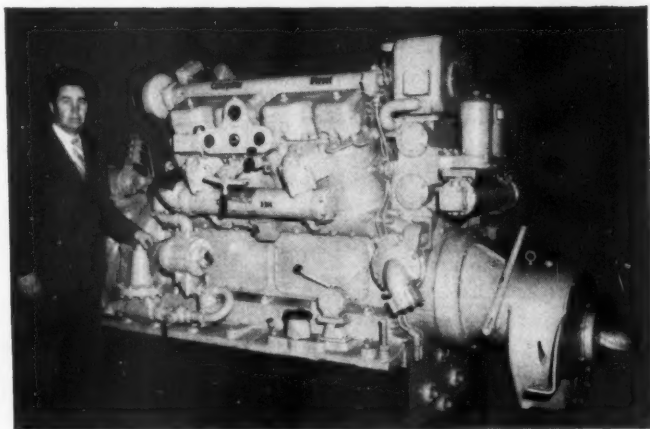
BOSTON

Acme (4)	14,700	Breeze (3)	209,300
Addie Mae (2)	5,700	California (2)	30,400
Adventure (L. Tr'ler) (1)	78,500	Calm (2)	249,200
Agatha & Patricia (4)	84,300	Cambridge (3)	247,600
Alden (1)	25,000	Capt. Drum (2)	57,000
Alphonso (3)	9,500	Carmela Maria (Dragger) (3)	36,600
American Eagle (1)	9,500	Carmela Maria (L. Tr'ler) (4)	14,000
Angie & Florence (3)	53,500	Catherine B. (Dragger) (4)	66,200
Annie & Josie (5)	15,300	Catherine B. (L. Tr'ler) (1)	3,500
Arlington (3)	278,800	Crest (2)	187,600
Atlantic (3)	164,200	Curlew (3)	9,900
Ave Maria (Dragger) (3)	14,100	Diana C. (3)	14,600
Bay (3)	202,200	Dorchester (2)	180,700
Billow (2)	103,000	Drift (3)	304,300
Bonnie (2)	196,800	Eddie & Lulu M. (2)	38,600
Breaker (3)	186,000	Eleanor (1)	25,000

(Continued on page 38)

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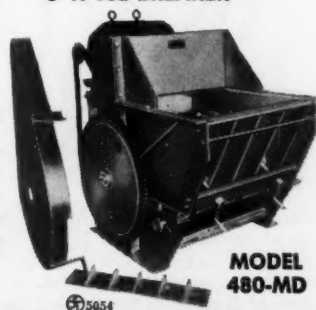
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(Continued from page 36)

Elizabeth B. (3)	130,300	Nancy F. (2)	31,700
Esther M. (2)	192,500	Neptune (3)	130,500
Estrela (2)	135,100	Nova Antonio (2)	14,100
Famiglia (2)	20,800	Nyoda (1)	12,300
Fanny F. Hickey (4)	28,000	Ohio (2)	108,700
Fleetwing (1)	4,600	Olympia (3)	71,900
Flying Cloud (2)	259,500	Olympia La Rosa (4)	86,100
4-C-688 (1)	3,100	Pam Ann (1)	42,000
4-C-887 (3)	5,100	Phantom (2)	177,600
4-E-885 (2)	1,300	Phyllis & Mary (4)	54,000
4-G-370 (4)	25,100	Pioneer (4)	45,200
4-G-673 (1)	4,200	Plymouth (3)	161,200
4-H-823 (3)	9,300	Princess (6)	22,700
Francesca (4)	22,000	Quincy (2)	103,000
Geraldine & Phyllis (3)	95,400	Racer (2)	159,900
Gudrun (2)	237,900	Red Jacket (2)	237,200
Helen M. (1)	15,200	Robert & Edwin (2)	1,500
Hornet (2)	9,100	Roma (3)	13,500
Ida & Joseph (1)	6,000	Rose & Lucy (1)	47,000
J. B. Junior (2)	149,100	Rosemarie (2)	24,600
J. B. Junior II (3)	11,800	Rose Mary (1)	1,000
Jennie & Julia (1)	25,000	Rosie (2)	6,500
Joe D'Ambrosio (2)	2,500	Rush (2)	83,200
Josephine F. (3)	15,400	Sacred Heart (3)	2,300
Josephine P. II (3)	66,600	St. Anna (4)	27,800
Josie M. (2)	1,800	St. Francis (4)	14,400
Leonard & Nancy (4)	76,700	St. Joseph (Dragger) (5)	108,200
Little Flower (1)	7,800	St. Joseph (L. Tr'ler) (1)	8,200
Little Nancy (4)	56,500	St. Michael Angelo (1)	3,200
Lorine III (3)	50,700	St. Rosalie (1)	27,700
Louise (1)	22,700	St. Theresa (2)	4,300
Lucky Star (2)	153,600	Salvatore & Grace (4)	87,400
Lynn (3)	180,600	San Antonio (3)	20,600
Madonna (2)	26,800	San Calogero (4)	32,100
Maine (3)	231,300	Santa Rita (3)	9,900
Margaret & Marie (3)	11,100	Santina D. (2)	19,700
Maria Immaculata (1)	15,400	Serafina II (1)	27,800
Marietta & Mary (3)	62,100	Six Brothers II (2)	8,600
Maris Stella (2)	122,100	Surge (2)	194,500
Marjorie (3)	36,400	Texas (2)	98,600
Marjorie Parker (1)	22,500	Thomas Whalen (3)	147,200
Mary & Jennie (4)	13,200	Triton (3)	116,700
Maria Del Soccorso (3)	6,800	Uncle Guy (2)	41,500
Marsala (3)	31,400	Wave (2)	147,700
Mary W. (1)	12,700	Weymouth (3)	185,900
M. C. Ballard (3)	89,200	Wm. J. O'Brien (3)	180,500
Michael G. (4)	16,500	Winchester (2)	206,000
Michigan (3)	199,300	Winthrop (2)	113,400
Nancy B. (3)	48,200	Yankee (1)	8,300
Scallop Landings (Gallons)			
Carol & Estelle (1)	1,000	Jerry & Jimmie (1)	1,100
Fleetwing (1)	1,100	Moonlight (1)	1,100

PORTLAND

Alice M. Doughty (4)	130,500	Ethelina (1)	35,500
Althea (2)	20,300	Evzone (2)	114,200
Araho (2)	83,500	Lawrence Scola (1)	7,700
Carolyn & Priscilla (3)	282,100	Manchinch (1)	31,200
Chanco (2)	108,000	Richard J. Nunan (2)	159,500
Cherokee (2)	82,300	Silver Bay (1)	103,500
Clara Louise (1)	137,600	Theresa R. (3)	191,600
Courier (1)	53,000	Thomas D. (1)	100,000
Cynthia (1)	1,000	Vagabond (3)	99,800
Eagle (3)	352,100	Vandal (2)	134,200
Elinor & Jean (3)	40,300		

New Hampshire Meeting Discusses Various Lobster Law Changes

Several changes in the present lobster laws, including more protection from law violators, were urged November 23 at a public hearing held at Hampton Beach by the Legislative Interim Commission named by the 1949 session to consider changes in the lobster laws. Rep. Ernest R. Underwood, chairman of the Commission, presided at the meeting. Approximately 30 lobstermen from the Hampton section attended.

Considerable discussion was devoted at the hearing to the adoption of the so-called Connecticut lobster trap, as a means of combatting the "short lobster" racket which has flourished along the New Hampshire seacoast. This trap permits illegal size lobsters to escape.

Members of the New Hampshire Legal Lobster Association who were present expressed their willingness to use the Connecticut lobster trap because "it is one of the best solutions to the short lobster problem." Periods ranging from one to three years were suggested for the fishermen to change their traps should the recommendation later be enacted as a law.

Other changes recommended at the hearing were: first, the assignment of a permanent warden to the coastal fisheries; second, that a boat for patrol purposes be at the disposal of the warden 24 hours a day; third, that hotels and restaurants be licensed to handle lobster meat; fourth, that restrictions be placed on the importation of "short lobster" meat from Nova Scotia; fifth, that "stiffer" penalties be imposed on those persons convicted of violating the lobster laws; and finally that funds be appropriated for the planting of "seed" lobsters.

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been insignificant. Looks good for years
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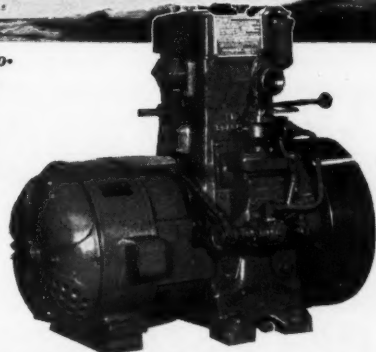
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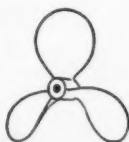


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Name

Address

Winter Overhaul

(Continued from page 13)

When repairing or building covers it may be wise to study the situation and then fit some quarter round metal to take care of the wear and tear.

Water and Fuel Tanks

Perhaps the water or fuel tanks have been bothering of late. If so, this is a good time to remove them and take them ashore for a thorough cleaning. There are products on the market which will be of assistance in cleaning tanks and keeping them clean. However, if you have been using other than white gasoline in your copper gasoline tanks, it may be possible that you will have to cut holes in the top of the tanks and scrape the heavy goo formed as a result of chemicals in the automobile type of gasoline coming in contact with the copper of the tank.

If the copper tank is thoroughly scraped on the inside and then washed with alcohol, it will remain clean for some time, but it is advisable to switch at once to white gasoline or the trouble will recur. If the copper tank is tinned on the inside, no trouble will be had with it, but your copper gasoline line and your brass or bronze carburetor will still be in contact with the offending automobile type of gasoline, and you may have trouble in these latter spots.

The marine toilet should be taken ashore and placed on a bench where it can be completely taken down, new bolts and screws fitted, new leather valves installed, and new gaskets, packings and so on used wherever necessary. One can purchase complete repair kits for any particular model of the better known makes of marine toilets. While you are about it, if the seat and cover are varnished, scrape and sand them and put on about three coats of good spar varnish.

The Cabin

If you can get the cabin dry and keep it dry, probably by use of a steady coal fire, then it is a good time to wash down, sand and scrape the woodwork, and generally prepare it for a coat or two of new paint or varnish. Use good taste in this re-decorating job, and it will pay you back many times over.

While fixing up the cabin, it may be well to give some attention to the cabin floor. If the floor is painted, then it may be wise to give it a couple of coats, and if covered with linoleum, it may be desirable to re-cover it, being sure to use a good quality of waterproof linoleum cement to bed the linoleum in. Use the battleship type of linoleum if you can possibly afford it (definitely use the burlap, not felt-backed quality), and be sure to use something like brass or Monel metal binding strips around the edges; never use aluminum for this purpose on a boat.

In order to have a really good job done on this, do not attempt it yourself, but rather have a man sent from the store who knows how to cut and lay linoleum. These men can be mighty good, and you will be pleased that you spent a little extra and had your linoleum professionally laid.

If you have pipe berths and they have been in the boat quite a while, it may be a good time to check them over to see if they are in need of new canvas bottoms. Bunks which have mattresses should be checked to see if the mattresses need recovering or replacement.

You may want to go so far as to improve the interior of your cabin for comfort, for convenience or for appearance in the matter of layout, and the man handy with tools may be able to accomplish a lot in this way if he spends the best part of a Winter at it in odd moments. Before attempting a major operation like this it is advisable to know just what you want to accomplish, whether you have ample room in which to accomplish it, whether you are going to want it when you get it done, and whether there is any danger of weakening the vessel by yanking out odd and sundry bulkheads.

A great many of the smaller fishing boats are not professionally designed and the cabin layout is not all it could be with a little careful study. Of course, you do not want to go to work on your own and move the engine around three or four feet one way or another to make room to hang up a few framed pictures, but it is sensible to try to arrange the galley better to gain more ventilation or to make it more convenient. Do not try to drop the cabin sole down to within two or three inches of the keel in an attempt to obtain more headroom.

New Bedford Catch Expected To Reach All-Time High

Overall landings at New Bedford for the year are expected to touch 105,000,000 lbs., for an all-time high. The previous record for New Bedford was 102,000,000 lbs., landed in 1945. Landings of 43,000,000 lbs. of trash fish through October 31 are responsible for the large production this year.

However, edible fish production in the port in 1949 will be 12,000,000 lbs. under the figure for 1948, according to a 10-month survey recently completed by the Fish & Wildlife Service. The survey shows 53,000,000 lbs. of fish and scallops landed for 1949 as of October 31, compared with 63,000,000 lbs. for the same period in 1948. On the basis of these figures the Service predicts landings of 62,000,000 lbs. of edible fish for the year; 74,000,000 lbs. were brought into the port in 1948.

Yellowtail, mackerel, cod and blackback all have shown marked decreases, and prices are down about 20%. However, deep-sea scallops, which were 850,000 lbs. over last year's landings November 1, brighten the picture. Value for the year's catch as of October 31 was \$8,050,000, compared with \$10,078,000 for the same period in 1948.

"Sister Alice" Sinks

The 58' New Bedford fishing vessel *Sister Alice*, skippered by Capt. Joseph M. Cardoza, sank south of Clark's Point, New Bedford Harbor, while bound in November 12, carrying 50,000 lbs. of trash fish. Her crew of three leaped into icy waters when the vessel began to take on water too rapidly for pumps to dispel. They were picked up by the New Bedford scalloper *Charles S. Ashley*, also bound in.

It is believed that choppy seas cracked a seam in the vessel, which is owned by John R. Moronha of New Bedford. Capt. Edward O. Sanchez and his salvage crew were attempting to raise the craft early in December.

"Mary Tapper" Sold

The 72' New Bedford scalloper *Mary Tapper* has been sold to James Elwood of New Bedford by William Q. MacLean, George Ponte and Charles Strang.

Overhauling Activities

Peirce & Kilburn, Fairhaven, has installed a new stern in Capt. Larry Burgess' 70' scalloper *Anna*. The vessel was damaged in an accident this Fall.

D. N. Kelley and Son, Inc., Fairhaven, hauled the 65' scalloper *Antonina* late in November for major repairs to her starboard side, which was stove in during a recent collision. She was expected to resume fishing by December 10.

Union Nominees

Nominees for offices of port agent and port delegate of the Atlantic Fishermen's Union, New Bedford branch, are Leo L. Barrett, incumbent agent; George E. Feener, incumbent delegate; Edward Patnaude, Lawrence Lawler, Sigmund Matland, John Pendergast and Ollie Lund. The election was scheduled for December.

Quahogging at Westport

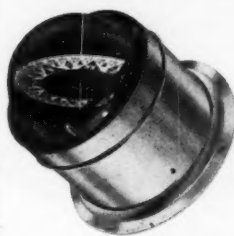
George Hart, Westport shellfish constable, has reported that on November 30, fourteen boats worked over beds that had just been opened for quahogging in an area west of Westport Point Wharf. This number included mostly local commercial fishermen. Each boat caught its daily quota of three bushels per man, for which \$2.70 a bushel was received, the usual price.

Provincetown Trap Fishing Nears End

Trap fishing in Provincetown Harbor and surrounding Lower Cape waters appeared to be about ended for the 1949 season the latter part of November. Most Provincetown trappers were busy unloading equipment they had hauled up from the areas where the traps have been operating since last Spring.

While more than 15 draggers were on the fishing grounds November 30, heavy seas and winds drove most boats into the shelter of the harbor. Many of them fished for flounders within the harbor. The catches, however, were not large.

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2. Eyelet Deep Water Gill Net Float, 1 1/4" x 4 3/4"
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New Brunswick Report

By C. A. Dixon

The opening of a new clam canning unit in the fish packing plant of H. W. Welch, Ltd., of Fairhaven, N. B., designed to furnish employment for factory workers, male and female (chiefly the latter), when sardines are not being canned or are so scarce that only a short time is required to pack them, is good news. At the time of writing, clam production is too small to permit full-time operation of the plant, but more fishermen are turning their attention to clam digging, now that weir fishing is over, and better supplies should be received at the cannery as the season advances. At the present time it is the only industrial project at Deer Island that provides a home market for those who dig clams, but sales are also being made to outside buyers. The price per barrel ranged from \$4.50 at the cannery to \$4.75 over the rail of boats from outside places. These prices are not as high as those being paid in Maine, it is understood, but nevertheless they are much more satisfactory than were prices of from 80 cents to \$1.25 a barrel received only a few years ago. At four or five dollars a barrel, a man can make a good day's pay on the clamflats even if he lets his feet drag and produces only one or two barrels a tide. John Will Leslie of Back Bay once averaged five barrels a day—but he died a few years ago and insofar as we know, there has not been anyone around these parts who pretends to equal the feat performed by him. Three barrels a day isn't bad.

Record Lobster Catch

A record lobster catch of 84,000 pounds made by the crews of 114 boats with 27,000 lobster traps was made at Grand Manan the first pull of the 1949 Fall season, according to the official report from that island. The first haul brought the fishermen more than \$27,000. It topped the previous record of \$83,000 (round figures) made in 1947 in the Fall, the opening day. In other sections of Charlotte County, fishermen did not do nearly as well, and in some places the season started off badly with only meagre lobster landings. In the St. Andrews Bay region the first haul was fairly satisfactory but from then on fishing tapered off to a rather discouraging degree, and at Deer Island and nearby places fishing was subnormal. The price of 27 cents a pound offered on the opening day of the season was not attractive enough for some of the fishermen along the mainland shore of southern New Brunswick, and they held their catches for 30 cents. But even the latter named price was far below that paid in the Fall of 1948. It may be, however, that the over-all catch of lobsters this Fall will exceed that of the 1948 Fall season owing to the fact that more men are engaged in the work and more traps have been set.

Among the new boats built in Nova Scotia for Grand Manan fishermen was that owned by Gleason Green of Ingalls Head. Capt. Green is heaping praise on his mate Ronald Small whose grit was responsible for extricating Green, Small and a passenger from a situation which might have cost them their lives. Capt. Green left Meteghan, N. S. for Grand Manan one day in November in his new boat, towing another new one astern for a Grand Manan neighbor. The wind was blowing from the southwest at 45 mph., and the Bay of Fundy was cutting up Jack with heavy seas running and a thick fog to hide their onslaughts. The boat astern was being towed with 55-fathom cable, and another 100 fathoms of reserve rope was coiled on Green's deck. Suddenly the towline parted, and the boat astern vanished in the fog. In turning around, the 100-fathom rope on the Green boat went overboard and fouled the propeller, stopping the engine dead. Capt. Green knew that someone had to go overboard to cut the rope from the propeller, but he said he would not ask another to do it. While he was pondering this, his mate Ronald Small undressed to his shorts, dove over the side into the boiling sea, and, armed with a knife, he tried to cut the rope that was snarled in the propeller. He found out, however, that he was on the wrong side to do effective work, so he clambered back aboard by use of the lifeline he had fastened to his body when he went overboard. He dove over the other side and cleared the rope.

Vineyard Bailings

By J. C. Allen

And now comes Winter, according to the Old Farmers Almanac, and so help us, if it is only 50 percent correct in its predictions, there will be plenty of days when the fleet will lay to the dolphins. As of now, however, with December rising fast on the weather skyline, only the foliage ashore offers a convincing sign that Winter is due.

No cold, no snow, only some heavy wind now and then, which is no change from the rest of the Fall and the heft of the Summer. And the fishing—well, during the week ending November 20th, some of the best dragged trips for the year were landed, and the one trap-fisherman who still had twine in the water told us solemnly that he was having the best fishing of the year!

With the water as warm as tea, it is not surprising that things vary from the normal, and yet all this is contrary to the old-timers' theory that fish move when the time comes, and cuss the weather which has nothing to do with it. Only it hasn't worked out that way this Fall.

Fluke, a summer fish, has hung close to the land right up to the end of November. As a matter of fact, tautaug fishermen, operating just clear of the rocks, picked up an occasional fluke, and the draggers found them without traveling any distance.

Pollock, which is a good food-fish, but worth darned little in spite of it, schooled chock into the beaches, and provided the finest kind of sport for the rod and reel fishermen, with here and there a commercial lad taking a jag.

Mackerel, the largest kind, showed up in late November, and encouraged the few lads who had not yet hauled out their gear. We had no mackerel at all during the Spring and Summer; driven to hell and gone by the bluefish, so they claimed. Well, they hit in the late Fall anyhow. Dogfish came, too, chasing the schools of English herring which filled the trap-twine, and here again was a species that wasn't worth saving.

We wonder why. Blue-back herring will eat about as well as anything of the kind, but, of course, they must be properly cured or prepared. It is things like this that make us incline to the belief that nature compensates for the scarcity of one fish by increasing another, the only tough part being that humankind does not always relish the variety provided in quantity. But can Nature help that? We wouldn't expect it.

Fall Varieties Plentiful

The regular Fall varieties appeared to be as plentiful as usual or better. Striped bass hung on, we know, because of the number taken for 30 to 40 miles around. Yet we know, too, that if the customs and practices of 50 years ago had prevailed, there would have been barrels of bass marketed, for every fish that was landed this Fall.

It was very much the same with the tautaug. We have it on the word of men who ought to know that there were and still are, more tautaug this Fall than we have had for years. Plenty of 'em have been marketed, but as in the case of the bass, only for different reasons, men don't go after them. You get "hung" in Massachusetts if you net striped bass, and if you catch tautaug, you get the top price only by holding them in cars until near Christmas.

But the thing that strikes us as significant, is the apparent fact that even as we write, with a sky as cold and gray as that of mid-Winter, and a sea the color of a shark's broadside, the wind still breezes from the suthered and the water is filled with breaching bait, over which the Winter gulls are flapping and fighting. This sort of thing does not happen unless there are fish around, and again we say that this is the compensation of nature.

Anyhow, Winter, whatever it brings, is just around the corner. The heft of the local lads have a fair chance of weathering anything that shows up, and every fair day that comes now, shortens up the cold period and brings Spring that much nearer. The world may be going to hell just as plenty of people say, but it's the best one we've got and we might as well make the most of it.

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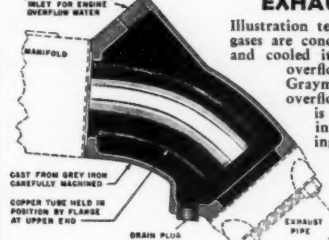


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(Continued from page 9)

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The new regulations provide that every container in which whitefish are packed for export shall be marked by a federal inspecting officer with the official inspection stamp if he is satisfied that such whitefish are in good merchantable condition.

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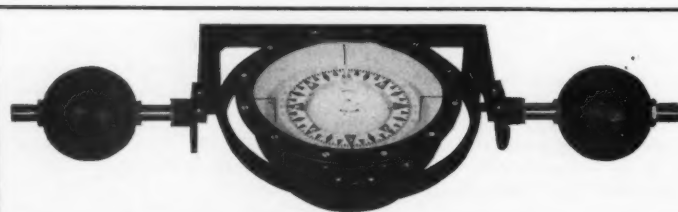
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Party or fish boat 44' x 13'7" x 4'6", raised deck, long cockpit, Chrysler powered, 15 knots, built 1947. Quick sale price \$3,500. Dragger 51' x 16.2', Lathrop 90 hp. Diesel, 2:1 red. gear, hull new 1940, full equipment for deep-sea fishing, ices 30,000 lbs.—want offer. 120 hp. Fairbanks-Morse, 4-cyl., Model 35 F, 8¾, new 1944, rebuilt '48, two air tanks, 46" propeller. Quick sale, \$950. Buda Diesel 60 hp. at 1200 rpm., 2.5:1 red. gear, all in good condition, want offer. These are only a few of our listings. Wire, telephone or write. Now is the time to buy. Knox Marine Exchange, Camden, Me.

ENGINE FOR SALE

Fairbanks-Morse Marine Diesel, 6 cylinder, 180 hp., Model 35 F 8-¾, 4 years old, Kinney clutches fore and aft, extras, \$2500.00 F.O.B. Greenport, L. I. Write Philip Reinhardt, Southold, L. I., N. Y.

TWO DRAGGERS FOR SALE

One 57' steel boat, one wood, 55' x 16' beam x 5'. Fully equipped, ship-to-shore telephones, 165 hp. G. M. Diesel, 3:1 reduction, tiptop shape, ready to go. New Bendix depth recorder on steel boat. Boats now dragging in Florida waters. Price wood boat, \$19,000.00. Steel, \$25,000.00. T. A. Smirch, Rt. #4, Box 17, Fort Pierce, Fla.

TANKER FOR SALE

For sale: tanker *Harbor Supply*, length 37.6', width 9.5', draft 4.4'. Capacity in cargo tanks approximately 3,000 gallons. This vessel is powered with a 4-cylinder A-Model Superior Diesel engine in good running condition. Can be seen at Portland Pier, Portland, Me. For details and other information write Harbor Supply Oil Co., Inc., 40 Portland Pier, Portland, Me.

TWO FISHING BOATS FOR SALE

Two fishing boats, 87' long, 21'6" beam, 320 Fairbanks-Morse Diesel engine, will hold about 130,000 lbs. of fish. These boats are four years old and in excellent condition. Price \$125,000 for both boats. Walter C. Benson, 18 Bartlett Parkway, Winthrop, Mass.

ENGINES FOR SALE

Three used Superior 180 hp., 400 rpm., 6-cylinder, 9 x 12 direct reversing marine engines with sailing clutch, fresh water cooling, front-end drive and 48" x 34", 3-blade Columbian propellers. 7-8 years old, in good condition. Now in service in Maine. To be replaced with 250 hp. Superior Diesels. Available end November to January 1. Price \$2,500 F.O.B. Portland. National Supply Co., Room 901, One Broadway, New York 4, N. Y.

DRAGGER "LINDY" FOR SALE

Dragger *Lindy*, 50' x 15' x 6', D13000 Caterpillar, ship-to-shore radio, 25-watt, 2 sets doors; 6 nets, 2 sets dredges, dory, pilothouse aft. Now scalloping. Price—\$15,500. George D. Olson, E. Washington St., Toms River, N. J.

DRAGGER "MARY A. EDWARDS" FOR SALE

Dragger *Mary A. Edwards*, length o.a. 110', breadth 14'9", power 150 hp., 6-cylinder Fairbanks-Morse Diesel engine. Overhauled and in good condition. Best fitted for dragging. Price \$25,000.00. Will accept any reasonable offer. For further information contact H. W. Sweet Shipyard & Machine Works, Inc., Greenport, L. I., N. Y. Telephone Greenport, N. Y. 91.

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